PEPH 2011 Workshop #1
Workshop Participant Project Description

Contents

Health Information National Trends Survey

Project Leader and Institution
Project Officer: Bradford Hesse, PhD, Institution: National Cancer Institute

Partners/ Key Personnel and Institutions
NCI

Project / Grant Number

PEPH Program

Brief Project Description
The Health Information National Trends Survey (HINTS) is a national probability survey of health communication processes that assesses cancer-relevant knowledge, attitudes, and information-seeking behaviors in the U.S. population. HINTS monitors trends over time in the following research questions: What are the major sources of cancer information for the American public?; To what extent is access to different sources of health information associated with cancer knowledge or behaviors?; What segments of the U.S. population depend on information technology to meet their cancer information needs?; How trusted are various sources of health information, and how satisfied are respondents with information access and content?; What is the level of knowledge about cancer incidence, etiology, prevention, detection, and treatability and what are the psychological and structural determinants of this knowledge?; and how are cancer prevention behaviors related to sources of information and their use? HINTS 1 was administered in 2002 and 2003 to 6,369 respondents. HINTS 2 was administered in 2005 to 5,586 respondents. HINTS 3 was administered in 2008 to 7,674 respondents. HINTS initially followed a biennial implementation schedule. Data collection for HINTS 4 will occur three years following the prior data collection in 4 data collection cycles of approximately 3500 respondents over a three year period.

Audiences
Health Care Providers
Researchers
Educators
Public Health Professionals
Policy Makers
Media/Journalist

Key Successes/ Outcomes
The key successes of the HINTS program derive from the use of data by our many partners and stakeholders. Beneficiaries of HINTS data include: the Office of Disease Prevention and Health Promotion, who has named HINTS as a data source to assess progress on several of their Health Communication and Health Information Technology Objectives for 2020; the U.S. Food and Drug Administration (FDA), who contributed items to HINTS 4 to assess public understanding of direct to consumer advertising; the Office of the National Coordinator (ONC), who designated content for inclusion in HINTS 4 to track the adoption of communication technology; the Centers for Disease Control and Prevention who are interested in using HINTS to track population awareness, knowledge, and perceptions of genetic risk; the patient advocacy community who relies on HINTS data for estimates of patient engagement in health and healthcare; health care professionals, who benefit directly from information about how the general public acquires health-related information to accommodate patients' health information needs; consumer informatics specialists, who use HINTS to make important decisions about how best to reach certain populations; public health professionals use HINTS data to inform their communication decisions; and behavioral and communication researchers use the data to inform the next generation of behaviorally oriented communication theories and to test specific hypotheses.

Key Approaches that led to success

In developing HINTS instruments, the HINTS program has always worked toward transparency and collaboration to engage members of the HINTS community in development of content for the survey to ensure that the data remain relevant and useful to the work of its primary stakeholders. This process, coupled with holding biennial data users conferences, has also helped to cultivate a community HINTS users. The HINTS management team has worked hard to encourage the use of the HINTS data through the development of program materials to support data analysis, that provide easy access to data results, and that summarize the implications of such results for the practice and science of health communication.

Obstacles/ Challenges

Coordinating input from a large number of individuals is always a challenge, particularly when survey real estate is always a concern. To help facilitate this process, we developed an online tool (HINTS GEM) to allow anyone to propose new content or comment on existing content. Keeping pace with the rapidly changing communication environment is challenging when the research and approval processes do not always move quickly. For the current implementation of HINTS we have attempted to build in some flexibility by developing an over-inclusive item pool for submission to OBM that we will draw upon to create 4 instruments over a 3 year field period. Budgetary constraints are often a concern. To off-set some of the survey cost, we have allowed other agencies to purchase space on the survey to field some of their items. Obtaining adequate response rates has been a difficulty for the HINTS program. We have tried to be responsive to changes in response rates through assessing and utilizing varying methodological approaches to data collection.

Communication Materials

Title	Format	Willing to share product?	In the RC?
http://hints.cancer.gov/	Website	Yes	
HINTS Briefs	Brief report - pdf or hard copy	Yes	Yes
HINTS Brochure	Brochure - pdf or hard copy	Yes	
HINTS Factsheet	Factsheet - pdf or hard copy	Yes	
Cancer Communication HINTS 2003 and 2005	Report - pdf or hard copy	Yes	
Analytic Methods to Examine Changes Across Years Using HINTS 2003 and 2005 Data	Report - pdf or hard copy	Yes	

Funding sources for this project

Funded through DCCPS operating budget.

Community-Based Participatory Approach to Farmworker Housing, Exposures & Health

Project Leader and Institution
Thomas A. Arcury, Department of Family and Community Medicine, Wake Forest School of Medicine

Partners/ Key Personnel and Institutions
Key Personnel (Wake Forest School of Medicine):
1) Thomas A. Arcury, PhD
2) Werner Bischoff, MD, PhD
3) Arjun Chaterjee, MD, MS
4) Haiying Chen, PhD
5) Steven Feldman, MD, PhD
6) Maria C. Mirabelli, PhD
7) Sara A. Quandt, PhD

Partners:
1. Myriam Hudson (North Carolina Farmworkers Project)
2. Melinda Wiggins (Student Action with Farmworkers)
3. Amy Liebman (Farmworker Advocacy Network)
4. Estela Viera (Carolina Family Health Center)
5. Anna Kinsey (Kinston Community Health Center)
6. Patricia Morales (Piedmont Health Services, Inc.)

Project / Grant Number
R01ES012358

PEPH Program
ARRA Challenge Grant

Brief Project Description
This project is using a community-based participatory research design to describe the quality of migrant farmworker housing in North Carolina, to delineate the associations of migrant farmworker housing quality with farmworker health, and to disseminate study results in an effort to improve farmworker housing and health policy. Partners include the North Carolina Farmworkers Project, Student Action with Farmworkers, Wake Forest School of Medicine, and several community and migrant clinics. The project is based on a cross-sectional design for documenting housing quality and exposures in migrant farmworker camps and measuring health indicators. Data collection was completed during the 2010 agricultural season, with housing assessments completed in 186 camps. Study results are beginning to shed light on the characteristics and quality of migrant farmworker housing and their associations with the health disparities experienced by the farmworker community. The partners are working with policy advocates to develop recommendations that address the environmental health implications of housing quality and encourage increased regulation of farmworker housing in an effort to reduce a variety of farmworker health disparities.

Audiences
Researchers
Community Residents/Groups
Policy Makers

Key Successes/ Outcomes
1) Recruited and successfully collaborated with respected community organizations and clinics

2) Completed data collection at 186 farmworker camps located in 16 different counties
3) Collected health information and biological data from 371 male migrant farmworkers, including comb samples to test for lice, urine samples to test for pesticide exposure, and spirometry to test lung function
4) Conducted environmental assessments at 186 farmworker camps, including collection of allergen samples, pesticide wipes, and water samples
5) Currently, one manuscript based on this project has been submitted for peer-review and 7 more are in development
6) Currently, we are partnering with advocates to promote legislation that improves farmworker housing quality based on our findings
7) We are developing additional projects to examine the relationship between housing and health among immigrant and farmworker populations.

Key Approaches that led to success

1) Our community-based approach meant that community partners were involved early in the development of this project, played an integral role in developing our study agenda and data collection instruments, participated in data collection and, presently, collaborate in the preparation and publication of study findings
2) Our comprehensive approach to understanding the effect of housing on farmworker health allows for a holistic understanding of the relationship between housing and health among a vulnerable and hard-to-reach population. The questionnaire was used to assess physical and mental health and housing perceptions, a thorough assessment of the residence was conducted, and a number of biological (e.g. urine sample) and environmental (e.g. allergen samples) were collected. This will allow researchers to look for detailed and nuanced connections between housing and health and develop targeted policy recommendations that are grounded in empirical observation.

Obstacles/ Challenges

1) Working with a vulnerable, hidden population on a potentially sensitive issue (housing) we found that we had to overcome much mistrust. Our community partners played a major role in providing us with credibility and facilitating trust among farmworkers throughout participant recruitment and data collection.
2) Broader community resistance to our work proved a challenge as some growers (the people who own the farms) were reluctant to allow strangers, including health workers and researchers, to visit and observe their farmworker camps. Our teams made every effort to be polite and left if asked.
3) Maintaining the consistency of data collection procedures among multiple field researchers and sites was a unique challenge as fieldwork among such a large number of sites and involving such a large number of researchers and participants lead to a variety of unique data collection challenges and a need for constant monitoring and discussion between the principal investigators, the project manager, and the data collectors.

Communication Materials

Title	Format	Willing to share product? In the RC?

Funding sources for this project

NIEHS (National Institute of Environmental Sciences); Grant #: 2R01ES012358-05

Green Cleaning Parties

Project Leader and Institution
Patricia J. Tracey, Johns Hopkins Center in Urban Environmental Health

Partners/ Key Personnel and Institutions
Greater Baltimore Asthma Coalition Members:
Barbara Bates Hopkins
Johns Hopkins Center in Urban Environmental Health
Elizabeth Toft
Coalition to End Childhood Lead Poisoning
Margret Schwitzer
Baltimore City Health Department
Johns Hopkins Center for Childhood Asthma in the Urban Environment

Project / Grant Number
NIEHS Center for Urban Environmental Health, Community Outreach and Education Core, PES0003819

PEPH Program
EHS Core Centers

Brief Project Description
Aim: To conduct green cleaning demonstrations in community settings impacted by asthma. Objective: To provide a safe atmosphere for learning, teaching and engaging about green cleaning in a fun and easy way. The "Green" Cleaning Parties were created to provide interactive, hands on activities to engage communities in a discussion about "green" cleaning. Many common household cleaning products that are being used contain chemicals that may have adverse health effects. This form of engagement includes fun activities that opens the conversation about asthma triggers, preserving the environment and alternatives to potentially toxic cleaning products.

Audiences
Health Care Providers
Researchers
Educators
Public Health Professionals
Community Residents/Groups
Policy Makers

Key Successes/ Outcomes
Each "Green Cleaning" demonstration included a pre- and post-test. Depending on the funding for the Green Cleaning Party, we would provide either a cleaning kit which included bucket(s), mop, gloves, baking soda, vinegar, cleaning clothes or sponges, green cleaning recipes and information or a spray bottle with a basic green cleaning recipe and additional green cleaning recipes and information. At each session, people were engaged, asked great questions, and discussed their intent to make use of the information provided them. They were very pleased with the take a-ways and sent their friends to participate. We engaged approximately 200 people in four events for the Green Cleaning Parties for Asthma Awareness Month (May). One of the events was conducted in April.

Key Approaches that led to success
The "Green Cleaning" Parties were successful because the audiences were having fun while learning some new information and some reinforcement. Our approach to the activity was to engage and share information not to make the audiences feel guilty or afraid. We also had lots of good information for them to walk away with and begin to think

about green cleaning. We also provided our contact information. We were invited to speak at a workshop for community outreach coordinators. At one event there was a high school student who actually ask to assist us with the demonstration and she was excellent. Feedback from nursing students was that they enjoyed the engaging activities.

Obstacles/ Challenges

The only challenge we were faced with was last minute changes at the event site. The Green Cleaning Party consists of singing songs, games and demonstrations that require a fair amount of space. A room is preferable, but we have been able to conduct our program in an open environment when given enough tables.

Communication Materials

Title	Format	Willing to share product?	In the RC?
Be An Asthma Idol	CD/Song Sheets	yes	no
be INFORMed: Strategies for a Better Environment	www.informinc.org		
A Fresh Start by Beth Swanson	www.naturalhomemagazine.com		
Alternative to Tozic Cleaning Products	http://boatsafe.com/nauticalknowhow/vessel_cleaning.htm		
Breath of Fresh Air	WSJ/com/Health		
Greater Baltimore Asthma Alliance: Green Cleaning Recipes	http://baltimoreasthma.org/		
Asthma Family Feud Game	PowerPoint Presentation	yes	no
Fishing for Asthma Clues	Games Pieces	yes	no
Let's Find Asthma Triggers	Poster Game	yes	no
Breathmobile	Asthma Education Mobile Van		
Dusty the Goldfish Activity Books	EPA Activity Book		

Funding sources for this project

Baltimore City Health Department/Greater Baltimoore Asthma Alliance
Johns Hopkins Center in Urban Environmental Health, Community Outreach and Education Core
Coalition to End Childhood Lead Poisoning
Amerigroup (Sponsored the Breathmobile for two events)
Alpha Kappa Alpha (AKA) Epsilon Omega Sorority

Tribal-University Collaboration to Address Tribal Exposures to PAHs and Improve Community Health

Project Leader and Institution
Anna Harding, Core Leader, Community Engagement Core, (Core E) SRP, Oregon State University

Partners/ Key Personnel and Institutions
Stuart Harris, Co-Leader, Core E, Confederated Tribes of the Umatilla Indian Reservation (CTUIR)
Barbara Harper, Co-Leader, Core E, CTUIR
Dave Stone, Co-Leader, Core E, OSU
Sandra Uesugi, Outreach specialist, Community Engagement Core, SRP, Oregon State University
Andres Cardenas, graduate student, CEC, SRP, OSU
Staci Simonich, Project leader, Project 6, SRP, OSU
Yuling Jia, postdoctoral researcher, Project 6, SRP, OSU
Oleksii Motorykin, graduate student, Project 6, SRP, OSU
Kim Anderson, Core leader, Analytical Core (Core D), SRP, OSU
Lane Tidwell, graduate student, Core D, SRP, OSU

Project / Grant Number
NIEHS P42 ES016465

PEPH Program
Superfund Research Program

Brief Project Description
In Spring 2011, the Confederated Tribes of the Umatilla Indian Reservation (CTUIR) and Oregon State University (OSU) Superfund Research Program (SRP) conducted research on polycyclic aromatic hydrocarbon (PAH) exposure through traditional tribal food smoking practices. This project was conducted through the extensive collaboration of the CTUIR Department of Science and Engineering, and OSU Superfund Research Program's Project 6, and the Analytical and Community Engagement Cores. This project examined PAH exposure during traditional salmon smoking in a traditional tipi structure and a modern smoke shed. The salmon was spring-run Chinook caught by a CTUIR fisherman. In addition to the two structures, smoking was conducted with two different wood types (alder and apple). The project will determine if there are differences in PAH type and amount when using the different types of wood and two different types of smoking structures, and whether personal air exposure differs between the two structures. Exposure was determined by use of a personal air monitor worn by CTUIR volunteers. Using in-person training and instructional videos created by the Community Engagement Core, CTUIR volunteers were trained by the Simonich group to use personal air monitors for sampling PM2.5 To complement the personal air sampling, the Anderson group sampled the air in the smoke houses using passive sampling devices (PSD). The PSD remained inside the smoking structure for the whole smoking process. To obtain a more complete picture of PAH exposure through food smoking activities, salmon and urine samples will also be analyzed for PAH levels. Anderson's research team will measure amounts of PAHs in the salmon before and after smoking. Simonich's research team will measure PAH levels in urine samples from Tribal volunteers doing personal air monitoring before and after the salmon smoking process.

Audiences
Health Care Providers
Researchers
Community Residents/Groups

Key Successes/ Outcomes

This project will provide a better understanding of total PAH exposure during tribal smoking practices. This project also promotes capacity building of Tribal members through scientific training and engagement in university collaborations. For the OSU team members, it was an incredible cross-cultural opportunity to witness and partake in this traditional fish smoking practice.

Key Approaches that led to success

This project could not have been accomplished without the extensive collaboration efforts between the CTUIR and all of the OSU SRP faculty and graduate students. A high level of communication, coordination, cooperation, and flexibility was required by all.

Obstacles/ Challenges

Because salmon must be smoked fresh and cannot be frozen before smoking, the ability to remain flexible in regard to the timing of the salmon run was crucial for both the OSU researchers as well as the CTUIR volunteers. An additional challenge was that the smoking process lasts several days, so this involves a considerable commitment on the part of the tribal members engaged in the research. The participants needed to be knowledgeable about traditional smoking methods and be willing to not only give up several days of work to participate, but also willing to submit to the inhalation monitoring protocols.

Communication Materials

Title	Format	Willing to share product?	In the RC?
Training videos	Video	yes	Pending
Personal air sampler - How to use and record field data	http://oregonstate.edu/superfund/training-using-personal-air-sampling-devices		
Person air sampler - Installing and removing the filter			

Funding sources for this project

NIEHS P42 ES016465

Windows of Opportunity: Preventing Childhood Lead Poisoning Through Window Replacement

Project Leader and Institution
Michael Weitzman, MD, New York University School of Medicine

Partners/ Key Personnel and Institutions
David E. Jacobs, PhD, National Center for Healthy Housing
Rick Nevin, National Center for Healthy Housing
Oneida County Dept of Health
New York City Dept of Health

Project / Grant Number

PEPH Program
ARRA Challenge Grant

Brief Project Description
This project will verify the effectiveness, cost and cost savings of (1) energy efficient, lead free window replacement and of (2) repair of old, energy inefficient lead-contaminated windows in pre-1950s residential houses in two communities in New York State in reducing lead dust, the most common source of lead exposure for children. It will produce documents that effectively explain the known energy savings and lead hazard reduction benefits of lead-safe window replacement, and the additional known energy savings and potential health benefits of combining duct sealing, high density insulation methods, and other weatherization measures with lead safe window replacement This effort will seek to build the capacity and trust between local communities, researchers, government officials, mortgage underwriters, utilities, and foundations to expand the use of lead-safe window replacement as a way of achieving both energy conservation and public health goals.

Audiences
Researchers
Educators
Public Health Professionals
Community Residents/Groups
Policy Makers

Key Successes/ Outcomes
Mortgage Lenders: Market benefits of window replacement offer a way to put equity put into older homes, because annual energy savings are transferred to future buyers along with other home characteristics that determine home value. Targeting foreclosed homes would also reduce costs because renovation work in empty homes is often less expensive. Window Manufacturers: Windows manufacturers might be willing to provide competitive bulk pricing for this initiative, especially with new construction demand severely constrained. Habitat for Humanity often receives in-kind donations from housing component manufacturers and this initiative could pursue a similar relationship with window manufacturers Utility Charities and Foundations: Many utilities sponsor fuel funds that appeals for utility bill-paying assistance and the appeal of such funds could be broadened to encompass energy efficiency, associated emission reductions, lead poisoning prevention, foreclosure prevention, and home price stabilization. Matching funds will also be solicited from foundations with related program activities.

Key Approaches that led to success
Collaboration with local health departments, weatherization agencies, window manufacturers, academia, and non-profit entities

Obstacles/ Challenges
Funding is intersectoral and remains inadequate

Communication Materials

Title	Format	Willing to share product? In the RC?

Funding sources for this project
NIEHS

Paducah Gaseous Diffusion Plant Future Vision Project

Project Leader and Institution
Dr. Lindell Ormsbee, Core Leader, UK-SRP Research Translation Core

Partners/ Key Personnel and Institutions
Anna Goodman Hoover, UK-SRP Research Translation Core
Dr. Chike Anyaegbunam, UK College of Communications & Information Studies
Dr. Ted Grossardt, Kentucky Transportation Center
John Ripy Jr., Kentucky Transportation Center
Benjamin Blandford, Kentucky Transportation Center
Dr. Keiron Bailey, University of Arizona
Steve Hampson, Assoc. Director, Kentucky Research Consortium for Energy and the Environment
The Citizens of McCracken and Ballard Counties

Project / Grant Number
US Dept. of Energy Grant #DE/FG05903OR23032NIEHS, Grant #P42 ES007380

PEPH Program
Superfund Research Program

Brief Project Description
Through the auspices of the Kentucky Research Consortium for Energy and the Environment (KRCEE), members of the University of Kentucky Superfund Research Program Research Translation Core have joined experts in Community-Based Participatory Communication and Structured Public Involvement to develop an innovative approach for community involvement in determining the future of Superfund sites. The KRCEE team has been charged by Kentucky's Congressional delegation and the United States Department of Energy with integrating public, regulatory, and technical community visions to produce a publicly approved Future State Vision Report for the Paducah Gaseous Diffusion Plant (PGDP) National Priority List Superfund site. The three-step methodology developed includes personal interviews, focus groups, and large community meetings, with individuals from disparate stakeholder groups engaged at each stage. The information gathered during the interview and focus group stages was utilized to create sample scenario visualizations that were discussed and scored during large community meetings, as well as in an online interface. Ultimately, the project will result in a "PGDP Future State Vision Document" that, while not decisional, will help inform future US Department of Energy decisions related to the disposition of the PGDP after decommissioning. A community consultation panel with representatives from sixteen unique stakeholder groups has worked with the team throughout to develop and improve the engagement process.

Audiences
Health Care Providers
Educators
Public Health Professionals
Community Residents/Groups
Policy Makers
Media/journalist

Key Successes/ Outcomes
— Increased knowledge of PGDP-related issues and available resources
— Increased awareness of pending closure and potential future uses of the site
— Mobilized community around future use issues
— Provided capacity-building experience in collaborative visioning

— Documented community values and scenario preferences for future advocacy

Key Approaches that led to success

Multidisciplinarity Use of multiple methods (qualitative and quantitative, CBPC and SPI) Use of engagement metrics and process evaluations

Obstacles/ Challenges

— Legacy Trust Issues — Entrenched Belief Systems — Institutional Barriers — Competing Academic-Community Epistemologies & Languages — Evaluation

Communication Materials

Title	Format	Willing to share product?	In the RC?
PaducahVision Website (with survey interface)	www.paducahvision.com	Yes	No
Final Project Report	In Press	Yes	Yes
Clu-In Risk e Learning Webinar (archived online)	http://www.clu-in.org/conf/tio/engagement1_033111/	Yes	No

Funding sources for this project

NIEHS Grant #P42 ES007380

Targeted Communication Training for UK-SRP Graduate Students and Postdoctoral Scholars

Project Leader and Institution
Anna Goodman Hoover, University of Kentucky Superfund Research Program (UK-SRP) Research Translation Core

Partners/ Key Personnel and Institutions
Stephanie Jenkins, UK-SRP Research Translation Core
Sarah Riley, M.A., Communication Instructor at Bluegrass Community and Technical College
Dr. Lindell Ormsbee, Core Leader, UK-SRP Research Translation Core

Project / Grant Number
NIEHS Grant #P42 ES007380

PEPH Program
Superfund Research Program

Brief Project Description
The 2010 Superfund Research Program strategic plan encourages programs to promote research relevance through interactions with stakeholders throughout the research process. This directive applies not only to community engagement and research translation cores, but also to scientific investigators themselves. The University of Kentucky SRP strives to meet these goals through translational interventions at both the investigator and the policy levels. In accordance with the UK-SRP's stakeholder-driven model of translation that moves beyond information dissemination and feedback and into high levels of multi-stakeholder engagement, the Research Translation Core has developed a training program for graduate students and postdoctoral scholars that encourages young scientists to develop audience targeting skills, promoting improved communication of research outcomes to specific stakeholder groups. Training participants then are given opportunities to practice these skills as presenters in state agency seminars and Superfund communities. This project promotes a holistic approach to multi-level stakeholder engagement across the program, speaking directly to the NIEHS's call for including stakeholders in the planning, execution, and dissemination of research projects.

Audiences
Researchers
Educators

Key Successes/ Outcomes
Presentations and a training workbook were developed for the pilot course and are currently being revised for future courses. Specific course sessions and workbook chapters address the topics of research translation, audience segmentation/targeting, tailoring presentation content for specific audiences, and tailoring presentation delivery for specific audiences.
--In the training program's first year, pre- and post-training survey data indicated a reduction in communication apprehension among participants.
--Pre- and post-presentations by participants were scored by reviewers and indicated improvement in the areas of audience targeting, presentation content, and delivery.
--Post-training participant evaluations indicated that the training program was well-received and considered helpful by trainees.
--Two of the five participants have since presented their research to Kentucky State Department for Environmental Protection (KDEP) through the UK-SRP RTC Seminar Series, with audience evaluations indicating that their presentations were clear, engaging, and relevant.

Key Approaches that led to success

Prior to the first session, participants were asked to create a presentation about their research for a specific community audience (i.e., homemakers in a rural Eastern Kentucky county). These presentations -- which tended to be highly technical and well beyond the scientific literacy level of the target audience -- were given during the first session and video recorded. Following the presentations, the trainers provided specific information about the audience, including extremely low educational levels in the county, then contrasted this information with the presentations content. This provided a touch-point for the remainder of the course, underlining the importance of knowing and addressing your audience in ways that have meaning for them. At the end of the training period, participants were asked to present their research to the same target audience given what they had learned during the course. These final presentations were also recorded, and the students were able to see their own progress.

Obstacles/ Challenges

Given that the initial training was structured as a pilot study to determine the efficacy of the training, recruitment was a challenge. In light of positive results -- both in terms of reduction in communication apprehension and improvement in targeted communication skills -- the RTC hopes to work with the UK-SRP Training Core to more fully integrate this communication training program into UK-SRP expectations for graduate students and postdoctoral scholars.

Communication Materials

Title	Format	Willing to share product?	In the RC?
Training Workbook	Spiral-bound workbook	Following revision	No
Course Session Presentations	MS PowerPoint	Following revision	Following revision
Adapted Communication Apprehension Survey	MS Word	Yes	No
Adapted Communication Evaluation Form	MS Word	Yes	No
Adapted Communication Skills Training Survey	MS Word	Yes	No

Funding sources for this project

NIEHS Grant #P42 ES007380

Hospitals for a Health Environment in Rhode Island

Project Leader and Institution
Phil Brown, Brown University

Partners/ Key Personnel and Institutions
David Spink and Peter Simon, Rhode Island Department of Health
Jennifer Quigley Harris and Carole Toselli, Real Food First/Kids First
Hannah Mellion, Farm Fresh Rhode Island
Mark Dennen and Beverley Migliore, Rhode Island Department of Environmental Management
Monica Anderson, Sandra Cheng, and Katie Collins, Miriam Hospital
Amanda Barney, Hospital Association of Rhode Island
Sylvia Weber, Rhode Island State Nurses Association
Lee Ann Quinn and David Floyd, South County Hospital
Liberty Goodwin, Toxics Information Project
Scott Patefield, Rhode Island Hospital
Peter Ginaitt, Lifespan Health Systems
Patricia Nadle, St. Josephs School of Nursing/Fatima Hospital
Beth Taub, Stephen Verardo, and Keith Murphy, Women and Infants Hospital
Paula Gillette, Newport Hospital

Project / Grant Number
1 P42 ES013660-01, 1P20ES018169-01

PEPH Program
Childrens Environmental Health Centers
Superfund Research Program

Brief Project Description
We sought to emulate the statewide project of Hospitals for a Healthy Environment in Maryland, to develop a project for all forms of environmental health and sustainability in health care institutions. We worked with that organizations and with Health Care Without Harm, an international coalition of likeminded groups. We initially planned to work with one hospital, Women and Infants Hospital, which is the main clinical and research partner in Brown's Children's Environmental Health Center. With guidance from the Community Advisory Board of the Center's Community Outreach and Translation Core, we expanded it to other hospitals. This made it a logical reason for the Superfund Research Program's Community Engagement Core to join in as well, since the effort involved a number of our formal partners (RI Department of Health and RI Department of Environmental Management), as well as organizations with who we work on other things (Farm Fresh Rhode Island, Rhode Island State Nurses Association). Our detailed report, including the conference agenda, is available in the PEPH Resource Center.

Audiences
Health Care Providers
Researchers
Educators
Public Health Professionals
Community Residents/Groups
Policy Makers

Key Successes/ Outcomes

Eighty people attended the first conference of Hospitals for a Healthy Environment in Rhode Island on March 10, 2011, organized by the Brown University Children's Environmental Health Center Community Outreach and Translation Core and Superfund Research Program Community Engagement Core. Hospitals for a Healthy Environment in Rhode Island (H2ERI) is a coalition of hospitals, hospital associations, professional associations, nursing schools, unions, academic institutions, government agencies, local food groups, and environmental organizations which works on promoting, cost effective, efficient, healthy and sustainable green care practice in health care institutions. H2ERI has joined Practice Greenhealth and is distributing its Eco-Checklist to hospitals, as well as offering them resources from our team in filling it out. We are also working to set up individual hospital Green Teams, to pursue the broadest possible range of environmentally sustainable and healthy practices. We have two students working as summer interns to get this under way.Subsequent planning committee meetings and individual discussions have added new items to the agenda: statewide planning to reduce pharmaceutical waste and to provide take-back locations; engaging hospitals in statewide Diesel Pollution Initiative to reduce diesel emissions in construction and maintenance at hospitals.We are now helping a colleague in Vermont organize a statewide group similar to ours.

Key Approaches that led to success

The Community Advisory Board of the Children's Environmental Health Center Community Outreach and Translation Core pushed us to adopt a more expansive position. Personal contact and visits with many health care institutions and providers were key to our success. Planning meetings with a broad-based Planning Committee produced much interest in participation.

Obstacles/ Challenges

One challenge is that some hospitals will worry that greening of health care will be costly. So we are providing evidence that such work often saves money. We need to develop a free-standing organization with a full-time staff member, in order to adequately pursue this work. We need additional funding sources to do this.

Communication Materials

Title	Format	Willing to share product?	In the RC?
Conference Report	Report	Yes	Yes

Funding sources for this project

Children's Environmental Health Center
Superfund Research Program

Informal Research Discussion Sessions

Project Leader and Institution
Laura Liang, MPH, CHES, University of Medicine and Dentistry of New Jersey

Partners/ Key Personnel and Institutions
Breast Cancer Research Center (NJ)
Mid-Atlantic Chapter of the American Lung Association
NJ Chapter of the American Parkinson Disease Association
GreenFaith (and faith-based organizations in New Jersey)

Project / Grant Number
Center for Environmental Exposures and Disease, University of Medicine and Dentistry of New Jersey
(Grant P30 ES005022)

PEPH Program
EHS Core Centers

Brief Project Description
COEC and its partners host informal research discussion sessions for their stakeholders each year. The discussion sessions better inform the public stakeholders about research and scientists who conduct the research, as well as provide an opportunity for the scientists to learn, first-hand, about the interests of the public. The discussion sessions bring together the public stakeholders and Center researchers in an informal and accessible setting to open up the lines of communication. Participants share their concerns about the particular disease and illness and its association with environmental factors. Sessions are 1.5-2 hours in length, provided at a site selected by the partnering organization and include 20-25 participants selected by the partnering organization. COEC has successfully implemented this strategy with its partners to translate and disseminate relevant research to the Parkinson's disease, breast cancer, asthma/lung disease and faith-based communities.

Audiences
Researchers
Public Health Professionals
Community Residents/Groups

Key Successes/ Outcomes
Both public stakeholders and scientists assess the informal research discussion session immediately following the session. Of particular interest was an assessment of participants' ratings for various program aspects of the informal research discussion sessions. Using a 4-point rating scale (1=poor; 4=excellent), public stakeholders rated their overall experience of the discussion session as a 3.52 and scientists rated their overall experience of the discussion session as a 3.68. Written comments on evaluation forms for both public stakeholders and scientists also demonstrated great enthusiasm for the sessions.

Key Approaches that led to success
o Focusing on a specific topic for a discussion session
o Including a broad range of researchers (from bench to clinical to translational)
o Limiting the number of public stakeholders (maximum of 30) to maintain the informal nature of the session

Obstacles/ Challenges
o Ensuring a variety of researchers participate
o Meeting the interests of the public stakeholders (they may have an interest in areas not covered by the researchers)

o When conducting a research session with faith-based organizations, there is a need to include additional time for marketing (as the marketing is typically limited to when their members get together, e.g., Sundays for worship service)
o It's important to create an open atmosphere so that the public stakeholders feel comfortable to ask questions and make comments

Communication Materials

Title	Format	Willing to share product?	In the RC?
Evaluation Materials	Print	Yes	Not at this time
Marketing Materials	Print	Yes	Yes

Funding sources for this project
National Institute of Environmental Health Sciences

Worker and Environmentalist Green Chemistry Awareness Training

Project Leader and Institution
Craig Slatin, University of Massachusetts Lowell

Partners/ Key Personnel and Institutions
Tolle Graham - Massachusetts Coalition for Occupational Safety and Health
Dr. Amy Cannon - Beyond Benign
Joel Tickner - UMass Lowell
Pam Puchalski and Mike Fitts - Connecticut Coalition for OSH
Elizabeth Saunders - Clean Water Action, MA
Steve Shragg - SEIU and Connecticut Coalition for OSHMA Toxics Use Reduction Institute
Alliance for a Healthy Tomorrow – MA Coalition for a Safe and Healthy Connecticut

Project / Grant Number
3U45ES006172-18S2

PEPH Program

Brief Project Description
UMass Lowell directs The New England Consortium (TNEC), a HAZWOPER worker health and safety training awardee of the NIEHS Worker Education and Training Program. TNEC worked with other partners to develop and deliver Green Chemistry training to 116 environmentalists and health and safety activists (Train the Trainer, and Community and Worker Training courses). The curriculum aims to empower individuals and organizations to advocate for policies supporting green chemistry. This was done in Massachusetts and Connecticut, in partnership with two state-wide coalitions for environmental public health: The Alliance for a Healthy Tomorrow (MA) and the Coalition for a Healthy and Safe Connecticut. Other critical partners included: Beyond Benign, a non-profit that promotes science literacy for sustainable production; and the Massachusetts Toxics Use Reduction Institute.

Audiences
Educators
Community Residents/Groups

Key Successes/ Outcomes
1) Develop draft manual;
2) Train the Trainer Workshop for 24 individuals;
3) 5 training sessions in MA and CT for healthcare workers (1), a green jobs coalition (1), community environmental group (1), mixed worker and environmental advocates (1), and high school teachers and students (1);
4) final manual developed based on draft and feedback provided after each training session - with two appendices for alternative activities, and an instructors guide.

Key Approaches that led to success
Curriculum development based on strong science, adult learning theory and practices, and prior curriculum for promoting environmental public health advocacy. Multiple opportunities for participation and feedback across partners. Incorporation of evaluation information in curriculum revisions.

Obstacles/ Challenges
As always, being able to find times for delivery of training that meet the schedules and demands of workers and community residents. Also, being able to explain the technical details of green chemistry to lay advocates who will need to be able to make policy arguments to advance the science and put it into practice.

Communication Materials

Title	Format	Willing to share product?	In the RC?
Green Chemistry Training Manual	PDF file	yes	not yet - but soon

Funding sources for this project

NIEHS Partnerships for Environmental Public Health, ARRA supplement to NIEHS WETP award

Assessment of Local Environmental Risk Training (ALERT) to Reduce Health Disparities

Project Leader and Institution
Peggy Toy, Project Director, UCLA Center for Health Policy Research

Partners/ Key Personnel and Institutions
John Froines, Research Scientist, and Elina Nasser, Community Outreach and Education, UCLA Center for Occupational and Environmental Health
Isela Gracian, Associate Director and Lina Stepick, Community Outreach, East LA Community Corporation
Elisa Nicholas, CEO, Jennifer Ponce, Community Programs, and Marisol Barajas, Community Outreach, The Children's Clinic

Project / Grant Number
RC1ES018121

PEPH Program
ARRA Challenge Grant

Brief Project Description
ALERT is a training and education project that aims to foster community-academic partnerships to address the priority air-quality issues identified by communities of color, low-income neighborhoods, and immigrant populations in Los Angeles. ALERT aims to enhance community-based participatory research (CBPR) skills of researchers and increase the capacity of community-based organizations to use scientific data in collaboration with academic researchers. ALERT is designed to increase environmental public health capacity by building trust between researchers and community members through collaborative education and strategic planning activities.

Audiences
Health Care Providers
Researchers
Educators
Public Health Professionals
Community Residents/Groups
Policy Makers
Media/Journalist

Key Successes/ Outcomes
ALERT established community partnerships and a CBPR network of local researchers who collaborated on the development and implementation of the project. Nineteen researchers participated in a CBPR conference; 12 went on to participate in ALERT community trainings. Fifty-four community representatives completed the ALERT Train the Trainer Course and subsequently conducted 19 Environmental Health Action Plan (EHAP) workshops, training over 300 community residents. ALERT also funded two CBPR pilot projects, based on EHAPs developed in the EHAP workshops. Results from the pilot studies will be available in 2012. Two of six planned skill clinics have been conducted: 1) Air Quality Policy Advocacy and 2) Qualitative Research Methods in Policy Advocacy. Both clinics rated 4.6 out of 5 points for relevancy to addressing air quality issues.

Key Approaches that led to success
Successful approaches include: Training researchers in CBPR methods. Collaboration with community partners and researchers to develop the ALERT curriculum investing both in the outcomes of the project. Creating the EHAP--an evidence based planning tool for community members. Using a train-the-trainer approach to develop community

trainers with the skills and tools needed to train other community members to develop evidence based action plans. The equitable engagement of both community members with researchers as facilitators and participants fostered trust and led to collaboration on the CBPR pilot projects to investigate local air quality health impact. Fostering community capacity to apply research to action strategies through Skill Clinics.

Obstacles/ Challenges

Because ALERT targeted researchers and community members, there were some challenges with scheduling and follow-up measurements/events. With respect to the community members, several of them were in life transitions, and thus lost to project follow-up and events beyond the initial train-the-trainer course. Also, many of the community members are parents and needed assistance with childcare. In regards to the researchers, majority of them were from academic institutions and had competing demands for time; thus, even though many expressed interest in being involved in the ALERT project and CBPR, institutional demands and requirements often limited their participation.

Communication Materials

Title	Format	Willing to share product?	In the RC?
ALERT Train-the-Trainer Course Curriculum	Curricula	Yes	Pending
ALERT Trainer's Guide	Booklet	Yes	Yes
ALERT Environmental Health Action Planning tool	Chart	Yes	Pending

Funding sources for this project

ARRA Funding
The California Endowment for 2 of the Skill Clinics

Projects SMART, AIMS and e-STEM: Louisiana Math-Science Partnership Professional Development Programs for 3rd and 4th Grade Teachers in East Baton Rouge Parish

Project Leader and Institution
Maud Walsh (project co-PI), Louisiana State University (Nell McAnelly, PI)

Partners/ Key Personnel and Institutions
East Baton Rouge Parish School System
Louisiana Department of Education
Louisiana State University
LSU Superfund Research Program

Project / Grant Number
1P42ES013648-01A2 (Project SMART is not funded by this, but it's related to the SRP grant activity).

PEPH Program
Superfund Research Program

Brief Project Description
Project SMART is one of several Math-Science Partnership professional development programs for 3rd and 4th grade teachers funded by the Louisiana Department of Education with support from the U.S. Department of Education. The programs aim to increase the subject content knowledge of teachers, with the ultimate goal of improving student achievement. The content must be closely aligned to state and national standards and state grade-level expectations. Although environmental health is not a specific focus of the standards, it has been incorporated into some activities and linked to the standards.

Audiences
Educators

Key Successes/ Outcomes
Teachers in the professional development programs are more aware of environmental quality and human health issues in their community, as well as ways for integrating the concepts into the prescribed grade-level expectations.

Key Approaches that led to success
Linking topics to current events (e.g. Deepwater Horizon spill) and familiar topics (e.g. asthma, cigarette smoking) was a successful way to start discussions and engage teachers.

Obstacles/ Challenges
Given the constraints imposed by No Child Left Behind and other mandates, science is often short-changed and there is very little flexibility in science content that teachers can deliver to students. Fitting environmental health-related topics into grade-level expectations in such a way that teachers feel comfortable incorporating them is often a challenge.

Communication Materials

Title	Format	Willing to share product?	In the RC?
Respiratory and Circulatory System	PowerPoint presentation	yes, but they're not	no
Volcanic Ash and Other Particulate Pollutants	hands-on activities (not original)	really products	

Funding sources for this project
U.S. Department of Education through the Louisiana Department of Education

Superfund Research Program (not specifically for the MSP Program, but for research translation)

Training Program for Community Members: Public Speaking on Air Pollution and Health

Project Leader and Institution
Carla Truax, COEC outreach coordinator, Southern CA Environmental Health Sciences Center, University of Southern California, Los Angeles, CA, ctruax@usc.edu

Partners/ Key Personnel and Institutions
Elisa Nicolas, M.D., Long Beach Alliance for Children with Asthma, Long Beach, CA, enicholas@memorialcare.org

Project / Grant Number
NIEHS 5-P30 ES07048

PEPH Program
Childrens Environmental Health Centers
EHS Core Centers

Brief Project Description
The Long Beach Alliance for Children with Asthma created a "Speaker's Kit" with the assistance of our COEC. The purpose of the kit was to provide community-friendly information to members of community organizations who want to speak at public meetings. It contains the basics of speaking at public meetings, as well as provide information about the topic area - air pollution and health effects from movement of international cargo containers. The Speakers Kit provided a useful tool for members of community organizations who are speaking in public settings about asthma and other health effects of air pollution from diesel mobile sources. The COEC assisted with research, writing, editing, and graphics for the kit, which included an introduction to goods movement, the agencies which regulate air pollution, the health impacts of air pollution, testimony tips, and a glossary of goods movement terms. The kit was also translated into Spanish. The kit was then successfully used with community members during training programs on public speaking.

Audiences
Community Residents/Groups

Key Successes/ Outcomes
Development and pilot testing of Speaker's Kit packet in English and Spanish. Successful implementation of the Speaker's Kit into a training program for community volunteers called the "Neighborhood Assessment Teams." Dissemination of Speaker's Kit to other community organizations in Southern California who are working on the same environmental health topic, and to the Asthma Coalition of Los Angeles County.

Key Approaches that led to success
Close collaboration with the community organization (an asthma alliance). Monthly meetings and assigning several people to different writing areas based on their expertise. Pilot testing with members of the intended audience during several stages in the development of the Speaker's Kit. Formative research (interviews) with the community organization and community residents.

Obstacles/ Challenges
Keeping the group on schedule, and ensuring the language sounds similar across the different pages of the product when several people are writing. Limitations in resources for graphic design and printing.

Communication Materials

Title	Format	Willing to share product?	In the RC?
Speaker's Kit	Written packet (or digital PDF)	Yes	pending

Funding sources for this project
LBACA funding from various sources were used for their contribution and for printing
USC staff time funded by our NIEHS Center, National Institute of Environmental Health Sciences 5-P30 ES07048

"A Breath of Air: What Pollution is Doing to Our Children" - 1/2 hour documentary video on the USC Children's Health Study

Project Leader and Institution
Andrea Hricko, COEC Director, Southern CA Environmental Health Sciences Center and COTC Director, Children's Environmental Health Center

Partners/ Key Personnel and Institutions
University of Southern California, Los Angeles - Annenberg School of Communication and Journalism

Project / Grant Number
Funded by NIEHS NIEHS 5-P30 ES07048, U.S. EPA, and California Air Resources Board grant 01-312

PEPH Program
Childrens Environmental Health Centers
EHS Core Centers

Brief Project Description
"A Breath of Air" details the work of USC scientists on the health effects of air pollution on children, and also the community perspective on air pollution in the Los Angeles area. It was produced and directed by Keren Markuze, with Andrea Hricko, a USC professor of preventive medicine at Keck School of Medicine as executive director, with primary funding from the California Air Resources Board, NIEHS, and U.S. EPA. The video tells the story of the USC Children's Health Study, the methods used by investigators to recruit and follow thousands of Southern CA school children over many years, have their families fill out questionnaires, have the students participate in lung function testing and various measurements at their schools by the USC field team, and how the results are analyzed and published. Thus, not only does it tell the research findings -- but helps the public understand the research methods.

Audiences
Health Care Providers
Researchers
Educators
Public Health Professionals
Community Residents/Groups
Policy Makers
Media/Journalist

Key Successes/ Outcomes
Following production of the video, which featured two Center investigators, several government officials, and mothers of children with asthma, the video was translated into Spanish. It was widely disseminated to lung associations, health care professionals, schools and families whose children are in the longterm USC Children's Health Study, which is featured in the video. It has had 18,440 hits on YouTube (the USC Channel) as of July 1, 2011. We hired an expert producer/videographer/editor which added to the cost but enhanced the professional look of the video.

Key Approaches that led to success
Andrea Hricko (executive producer of the video and COEC director) had 10 years of journalism experience, which helped her in planning the video and raising funds for it. Keren Markuze, the director and writer, was a recent graduate of the USC Annenberg master's in broadcast journalism and was recruited by Hricko through discussions with Annenberg faculty. The focus of the video was not just on scientists, which might have seemed "dry" to the audience -- but the video started out with and concluded with community members talking about problems in their communities and how

air pollution affects their own children. Thus, the message personally reached out to the public as well as to a broader well-educated health care and scientific population.

Obstacles/ Challenges

We raised approximately $30,000 for the project from the California Air Resources Board, which involved hiring the producer/writer/videographer/and editor. Nonetheless, the producer operated on a shoestring in terms of her salary and time spent. We could have produced a less professional video but it would not have been received as well. We have shown this own at multiple conferences on a very large screen, which would not have been possible with an amateur video.

Communication Materials

Title	Format	Willing to share product?	In the RC?
28 minute videos in English and Spanish	DVD Video	Yes	Yes
Discussion Guide	Written Discussion Guide	Yes	Yes

Funding sources for this project

California Air Resources Board grant 01-312
NIEHS (salary for Hricko) 5-P30 ES07048
U.S. EPA (salary for Hricko)

Digital Storytelling by Community Leaders

Project Leader and Institution
Andrea Hricko, COEC Director, and Carla Truax, COEC outreach coordinator, Southern CA Environmental Health Sciences Center

Partners/ Key Personnel and Institutions
Trainers: Digital Rain Factory and Center for Digital Storytelling, Gayle Nicholls, gaylenicholls@gmail.com, and Rasheed Ali Partners whose members created digital stories: East Yard Communities for Environmental Justice
Center for Community Action and Environmental Justice
Long Beach Alliance for Children with Asthma
Coalition for a Safe Environment
Urban and Environmental Policy Institute, Occidental College

Project / Grant Number
NIEHS 5-P30 ES07048, and grants to The Trade, Health and Environment Impact Project from The California Endowment grant 20081952 and The Kresge Foundation grant 239031

PEPH Program
EHS Core Centers

Brief Project Description
COEC faculty and staff attended a training session on digital stories held by the Center for Digital Storytelling, which taught the process of writing a story and using images to create a short personal video. This prompted the idea that these could be used with community organizations, and the COEC organized a training session for our community partner organizations on creating digital stories. These are short videos that are written, narrated, edited, and produced by community leaders. The community leaders, members of community organizations who advocate for clean air in their communities, learned how to collect their photos and videos and write a story about how they were motivated to dedicate their efforts to improving their communities. Digital Rain Factory/ Center for Digital Storytelling provided the 2 day training where participants learned and created their videos together. COEC staff held preparation sessions and assisted the participants during the training with the writing and video editing process.

Audiences
Community Residents/Groups

Key Successes/ Outcomes
Creation of six videos, posted on The Impact Project website www.TheImpactProject.orgHigh ratings by participants of the training, the end products of the videos, and that the training process made them feel empowered to share their stories.The training spurred several follow-up trainings by the community organizations, where the person who participated in the original training then trained others in their organizations.

Key Approaches that led to success
Collaborative planning with the community organizations to shape the structure of the training. Highly talented trainers from Digital Rain Factory/ Center for Digital Storytelling. An existing openness and trust between participants that had been built through several years of working together.

Obstacles/ Challenges
Logistics of the training, including finding computer lab space, and getting the necessary software. Lack of computer skills for some of the participants. Language barriers with English speaking trainers and Spanish speaking participants, needed a translator which took a bit more time for the session.

Communication Materials

Title	Format	Willing to share product?	In the RC?
Digital Stories	Videos posted on website	Yes	Will upload

Funding sources for this project

The California Endowment grant 20081952
The Kresge Foundation grant 239031
National Institute of Environmental Health Sciences 5-P30 ES07048

Journalist training programs
Annenberg School of Journalism, University of Southern CA

Project Leader and Institution
Andrea Hricko, COEC Director, Southern CA Environmental Health Sciences Center, University of Southern California (USC), Los Angeles, CA

Partners/ Key Personnel and Institutions
USC Annenberg/California Endowment Health Journalism Fellowships (Michele Levander, director; levander@usc.edu)
USC Annenberg Institute for Justice and Journalism EJ Training (Steve Montiel, formerly of USC; Janet Wilson, independent journalist)

Project / Grant Number
NIEHS 5-P30 ES07048

PEPH Program
EHS Core Centers

Brief Project Description
Our Center investigators and COEC have participated in three programs of the USC Annenberg School of Journalism. (1) The California Endowment Health Journalism Fellowships program was established to provide mid-career professional working journalists with tools and training to report on health-related topics. It offers journalists a chance to step away from the newsroom to hone health reporting skills. Andrea Hricko, COEC director, and several community partners have spoken at training sessions, including in L.A., Sacramento, and the Central Valley of California. Several Center investigators have each spoken at one or more of the training sessions. The topics have been about air pollution and health, and also to introduce journalists to environmental health problems surrounding international trade in U.S. communities.(2) The IJJ held a weeklong institute on Environmental Justice. Andrea Hricko, COEC director, and John Froines, director of the Center's exposure assessment research core, each spoke, and Hricko led a day-long tour of the Ports and rail yard operations in Los Angeles. For each training session, Hricko assisted in bringing community members to speak to the journalists about environmental health problems in their communities.

Audiences
Researchers
Community Residents/Groups
Media/Journalist

Key Successes/ Outcomes
However, a key example of a successful outcome is the interest developed in one of the reporters from Chicago who attended the IJJ training program and participated in the day-long tour of ports and rail yards. As a result of that program, she has become interested in air pollution and the international trade/"goods movement"/freight transportation issue and has written several articles on this topic. See, e.g., Dirty Secret by: Kari Lydersen, "Pollution from rail yard emissions in the Chicago area plagues the health of nearby residents." http://www.chicagoreporter.com/issue/index.php?issueId=479). With several other journalists involved in the training programs, Hricko has connected the journalists to scientists at the Center. See, e.g., "Don't light that fire," quoting professor Ed Avol, a Center investigator.

Key Approaches that led to success
Developing contacts between our Center, based at the Keck School of Medicine, and the Annenberg School for Journalism's workshops for reporters has led to invitations of the COEC director and several of our investigators to speak at Annenberg workshops for journalists. Our Center has participated in at least seven of these programs.

Obstacles/ Challenges

It is hard for our Keck School of Medicine, where our Center is based, to maintain regular contact with the Anneberg School, because they are seven miles apart, at different campuses. In addition, it has been hard to track outcomes because the COEC does not have access to the list of all journalists in all the training programs.

Communication Materials

Title	Format	Willing to share product?	In the RC?
Agenda: Ethnic Media Fellowship Conference - "Urban Environmental Justice, Reporting the Full Story"	.pdf copy	Yes	pending

Funding sources for this project

School of Journalism programs were funded by:
The California Endowment
The California HealthCare Foundation
Ford Foundation (IJJ)
Center members time from the Southern CA Environmental Health Sciences Center funded by NIEHS 5-P30 ES07048

Science Communication Fellows Program - Environmental Health News Fellowship

Project Leader and Institution
Dr. Heather Volk, junior investigator at the Southern CA Environmental Health Sciences Center, is a Science Communication Fellow for 2011.

Partners/ Key Personnel and Institutions
Marla Cone, Environmental Health Science News Editor in Chief, mcone@ehn.org
Heather Volk, PhD, Assistant Professor, University of Southern California, Southern CA Environmental Health Sciences Center, Los Angeles, CA Contact: Andrea Hricko, COEC director, ahricko@usc.edu

Project / Grant Number
NIEHS 5-P30 ES07048

PEPH Program
EHS Core Centers

Brief Project Description
Science Communication Fellows Program: Every year, Environmental Health News selects 10 Science Communication Fellows who translate and publish new research findings that link environment and health and aim to increase public awareness and understanding. The 10 selected outstanding researchers who serve as fellows bring with them a wide range of experiences and intimate understanding of diverse disciplines. During the year-long program, they develop the essential skills to convey in plain and engaging language important research findings that link the environment to human health and disease. They also become valuable sources for reporters who write about these complex issues. They write synopses of newly published scientific articles and the synopses appear in the "Above the Fold" daily news digest published at EHN. See: http://www.environmentalhealthnews.org/ehs The program's aims are to train future leaders and increase public awareness and understanding of the rapidly evolving research associated with the interdisciplinary fields associated with environmental health sciences and green chemistry. The program alerts journalists and the public to new findings through original research reviews and commentaries published electronically. In the process, the Fellows gain a wider world view and make important connections with one another and with new scientific ideas. Environmental Health Sciences – publisher of Environmental Health News and The Daily Climate – sponsors the program, which started in 2007. Another Charlottesville-based organization, Advancing Green Chemistry, is a partner in the project. Prominent scientists who serve on the selection committee, include: Lynn R. Goldman, George Washington University; Louis J. Guillette, Jr., Medical University of South Carolina; Patricia A. Hunt, Washington State University; Richard J. Jackson, University of California-Los Angeles; Shuk-mei Ho, University of Cincinnati; Shanna H. Swan, University of Rochester; and Frederick vom Saal, University of Missouri-Columbia.

Audiences
Health Care Providers
Researchers
Educators
Public Health Professionals
Community Residents/Groups
Policy Makers
Media/Journalist

Key Successes/ Outcomes
This program has enabled Center investigator Heather Volk (a researcher interested in neuodevelopmental diseases) to have communications/media training at 2-day workshop in Washington, DC. She has written several stories on environmental health emerging research for Environmental Health News and a recent story she wrote about a new

autism and prenatal vitamin study appeared as the lead story in Above the Fold. See: http://www.environmentalhealthnews.org/ehs/newscience/prenatal-vitamins-lowers-autism-risk/

Key Approaches that led to success

This fellowship program has environmental health scientists on its selection committee and a top team of environmental health journalists running the training program. Fellows have a training session during the year and monthly phone calls to discuss their work. They learn to communicate scientific findings in lay language and learn how to better communicate with the media, a skill useful for their future careers.

Obstacles/ Challenges

Communication Materials

Title	Format	Willing to share product? In the RC?

Funding sources for this project

NIEHS 5-P30 ES07048

Mastering Molecular Biology with Models: Connecting with DNA with Health

Project Leader and Institution
Dr. Kathleen M. Vandiver, Massachusetts Institute of Technology

Partners/ Key Personnel and Institutions
Dr. Amanda Gruhl, Massachusetts Institute of Technology
Dr. John Durant, Director, MIT Museum
Ms. Pamela Pelletier, Boston Public Schools, Science Program Sr. Administrator.

Project / Grant Number
NIH-NIEHS Center Grant P30-ES002109NIH, NIEHS Center Grant P30-ES002109

PEPH Program
EHS Core Centers

Brief Project Description
Gene-environment interactions are one of the key areas of research at our Center at MIT. Thus to assist in communicating health information on this subject, our Community Outreach and Education Core provides teachers and students with engaging tools for biology education. We have designed a LEGO DNA Learning Center Set which is optimized for teaching how DNA directs protein production and other fundamental cell processes. The key concepts are enacted by the learner's hands while the mind is engaged in making the decisions. The LEGO models are inviting/friendly yet very sophisticated in representing amino acids, and tRNA, and the DNA/ RNA nucleotides. We have been teaching students groups and teacher workshops at the MIT Museum for several years in an exhibit room which represents a cell. The Boston Public Schools Science Program Manager came to us to request that we distribute the LEGO curriculum and the kits to all 32 HS in Boston. We have successfully completed our pilot year with the Boston Public Schools 2010-2011 and the partnership is beginning year 2.

Audiences
Health Care Providers
Educators
Public Health Professionals
Community Residents/Groups
Policy Makers
Media/Journalist

Key Successes/ Outcomes
1) Students are highly engaged.
2) Teachers are excited and want to participate. Adults like to learn this way. It is not intimidating. Also adults work with a partner and converse.
3) Students with limited English proficiency are particularly drawn to learning this biology material, because they have a visual (better yet--a tangible object!). These models help to convey complex ideas because the cell processes can be reenacted. The models also make the English vocabulary manageable.

Key Approaches that led to success
1) Selecting LEGO as the medium for the models, was very useful. LEGO models invite people to play. Also for people who think they know all the biology, these people are curious to see how it is done with LEGO, so the medium remains as good hook for all.
2) We created molecular models that not only function well, feel good to the touch, but can be used to teach at multiple levels.

3) We can control the level of the vocabulary for the audience.
4) We designed multiple lessons and can vary the teaching level from a fourth grader's interest to an AP Biology student's need. (#5 is next... down)
5) DNA repair proteins and their connection to cancer can be more easily explained using the LEGO DNA model.
6) We teach in multiple modalities: use LEGO models,software programs, videos, paper and pencil, etc.

Obstacles/ Challenges

Challenges-- We have produced a number of the LEGO DNA Learning Center Sets with all the support materials (LEGO DNA/ RNA sets, Protein sets, and tRNA sets with Teacher Guide, PPT, DVD and video animations, student booklets, posters, etc.) These sets are being placed where they will serve a maximum of teachers and students-- for maximum good. However, ideally we would like the LEGO company to produce these sets to make them more broadly available. Currently each Learning Center Set requires about 120 hours of volunteer labor to produce from the individual standard LEGO parts which are available as individual pieces. Should the LEGO company decide to produce the sets, they would optimize the design to reduce the piece count and thus the effort for assembly. Note: All materials have been copyrighted MIT and the LEGO Group and we are in touch with LEGO,

Communication Materials

Title	Format	Willing to share product?	In the RC?
LEGO DNA Learning Center Set	14 students kits of DNA/ RNA	Yes	Pending
	14 student kits of Proteins		
	9 student kits of tRNA		
	14 Student booklets for ea.above		
	Teacher Guide w. PPT		
	posters, mats, layout mats , etc		
	DVD computer lesson		

Funding sources for this project

COEC NIH-NIEHS Center Grant P30-ES002109
Arthur Vining Davis Foundations
NASA - Massachusetts Summer of Innovation (SOI)

Online Environmental Health Training for Journalists

Project Leader and Institution
Erin Haynes, Dr, PH, and Lisa Meloncon, PhD, University of Cincinnati

Partners/ Key Personnel and Institutions
Patrick Ryan, PhD, University of Cincinnati
Lisa Groh, University of Cincinnati
Callie Lyons, The Anchor
Megan Parin, University of Cincinnati
Elissa Yancey, University of Cincinnati

Project / Grant Number
R03 HD059615

PEPH Program
Partners in Research

Brief Project Description
The project was designed to enhance understanding of the environmental health science topic of air particles and their impact on health. Air pollution is an environmental health area that is highly reported on by journalists and our goal was to develop a short, easily accessible, interactive module that would increase journalists understanding of air particles and health. The module was developed as a resource for journalists to obtain accurate information to incorporate into their news stories. It can also be used by public health professionals and community residents who want to know more about air particles and their effect on health. The module includes interactive knowledge checks throughout to keep participants engaged. The survey takes participants about 15 minutes to complete.

Audiences
Health Care Providers
Educators
Public Health Professionals
Community Residents/Groups
Policy Makers
Media/Journalist

Key Successes/ Outcomes
Developing a online interactive module for air particles and health met a need and request from our research community's community advisory board (CAB). The project increased our interaction with local journalists providing multiple-way interaction between our CAB, journalists and environmental health scientists. The module was rated highly by journalists for its content, ease of use, and increased their knowledge of air particles and health. They also stated that it would improve their reporting on air pollution.

Key Approaches that led to success
Working through our CAB, we were able to connect with local journalists who helped develop the module's organization and content. The willingness of Dr. Patrick Ryan who led the scientific content for the project is to be commended. Partnering with a wide-reaching organization such as the Society of Environmental Journalists, connected us to a large volume of journalists, and drastically increased participation in the research component of the module.

Obstacles/ Challenges

We targeted the journalists residing in our target research community, and the number of participants was small. We overcame this challenge by expanding to a national audience of journalists through the Society of Environmental Journalists.

Communication Materials

Title	Format	Willing to share product?	In the RC?
Online Journalist-Scientist Module	Online Module on Website	Yes	Pending
Survey	Online Module on Website	Yes	Yes
Handout	PDF Download (Website)	Yes	Pending
Air Particle Video/Module	Online Module on Website	Yes	Pending

Funding sources for this project

R03 HD059615
R01ES016531

Physician Online Training in Pediatric Environmental Health

Project Leader and Institution
Nicholas Newman, D.O., University of Cincinnati & Cincinnati Children's Hospital Medical Ctr

Partners/ Key Personnel and Institutions
Erin Haynes, DrPH, University of Cincinnati
Lisa Groh, University of Cincinnati
Megan Parin, University of Cincinnati

Project / Grant Number
R03 HD059615

PEPH Program
Partners in Research

Brief Project Description
The creation of an online Pediatric Environmental Health physician training "module" (interactive video and powerpoint presentation) and accompanying research survey designed to evaluate the module's success. The module provides physicians with up-to-date scientific information regarding pediatric environmental health, and the research study aims to advance pediatric environmental health physician training. Participants complete pre and post module surveys, each taking about 15-20 minutes to complete. Physicians who opt to participate in the research study will receive a follow-up survey six months after taking the module to assess the incorporation of pediatric environmental health principles into physician practice.

Audiences
Health Care Providers
Educators
Public Health Professionals

Key Successes/ Outcomes
The primary success of this project is the development of an interactive online module for physicians offering CME units. Physicians in rural, communities are the target audience for the module; however, if is available for all physicians.

Key Approaches that led to success
Collaboration with a technical writer and distance learning specialist were essential in anticipating usability problems and creating a version of the module that was user friendly, clear, and straightforward.

Obstacles/ Challenges
The primary challenges were the IRB and CME approval processes. Obtaining CME approval was laborious including the application process, the time lag between revisions, and in our case, the development of two module options (one research; one non-research) which required revisions by the distance learning specialist, our staff, and CME staff. Now developed and fully approved, the primary obstacle we now face is "getting the word out" about the module. To surmount this challenge, we are collaborating with larger more networked environmental education and physician organizations to promote this educational opportunity.

Communication Materials

Title	Format	Willing to share product?	In the RC?
Pediatric Environmental Health Online Module	Interactive Online Module	Yes	Pending
Survey to assess pre and post knowledge and use of the Pediatric Environmental Health	Website	Yes	Yes

Specialty Units.

Content summary handout	PDF Download (Website)	Yes	Pending

Funding sources for this project
R03 HD059615
T32 ES010957
T42OH008432
R01ES016531

Development of Child-Friendly Research Study Website

Project Leader and Institution
Lisa Meloncon, PhD, University of Cincinnati

Partners/ Key Personnel and Institutions
Erin Haynes, Dr, PH, Caroline Beidler, Neighbors for Clean Air, Community Advisory Board, Marietta Community Actively Researching Exposure Study (CARES)

Project / Grant Number
R03 HD059615

PEPH Program
Partners in Research

Brief Project Description
Students in the technical writing program at the University of Cincinnati were challenged with the task of developing a child-friendly website for the Marietta Community Actively Researching Exposure Study (CARES). This project originated from the request of the CARES Community Advisory Board. The website was tested on research study participants, children ages 7, 8 and 9 years old, and changes were made based on their feedback. Guidelines for building educational websites for children were also developed.

Audiences
Researchers
Educators
Community Residents/Groups

Key Successes/ Outcomes
The success of the project lies in the effective bi-directional communication among the partners. The community advisory board saw the need, the technical writing students worked to define the research terms, and research scientists reviewed final content. The community now has access to all of the key terms used in the research study.

Key Approaches that led to success
Working with the CARES Community Advisory Board we responded to the community's desire to have child-friendly website that clearly defined the CARES research study. Partnering with faculty and students in a technical writing program provided a real-world training opportunity for students while meeting a direct community need.

Obstacles/ Challenges
The obstacles that needed to hurled included institutional review board approval, scheduling the website testing with the children, and student website development issues.

Communication Materials

Title	Format	Willing to share product?	In the RC?
Child environmental health online games	Website	Yes	Pending
Designing educational websites for children	Handout	Yes	Yes

Funding sources for this project
R03 HD059615
R01ES016531

Defining the Research Study for the Community

Project Leader and Institution
Lisa Meloncon, PhD, University of Cincinnati

Partners/ Key Personnel and Institutions
Erin Haynes, Dr, PH, Caroline Beidler, Neighbors for Clean AirCommunity Advisory Board, Marietta Community Actively Researching Exposure Study (CARES)

Project / Grant Number
R03 HD059615

PEPH Program
Partners in Research

Brief Project Description
Students in the technical writing program at the University of Cincinnati were challenged with the task of defining key research study terms for the community. The study terms are based on the research of the Marietta Community Actively Researching Exposure Study (CARES). This project originated from the request of the CARES Community Advisory Board. The slide show definitions are interactive and available on the CARES website.

Audiences
Researchers
Educators
Community Residents/Groups

Key Successes/ Outcomes
The success of the project lies in the effective tri-directional communication among the partners. The community advisory board saw the need, the technical writing students worked to define the research terms, and research scientists reviewed final content. The community now has access to all of the key terms used in the research study.

Key Approaches that led to success
Working with the CARES Community Advisory Board (CAB) we responded to the community's interest in learning more about the research study and its terminology. Partnering with faculty and students in a technical writing program provided a real-world training opportunity for students while meeting a direct community need. Feedback from the CAB throughout the process was also key in the project's success.

Obstacles/ Challenges
Challenges included the lack of content expertise from the technical writing students. This was overcome through expert review by the CARES research scientists.

Communication Materials

Title	Format	Willing to share product?	In the RC?
Online interactive research study terminology	Website	Yes	Pending

Funding sources for this project
R03 HD059615
R01ES016531

Building a Scientist-Journalist Relationship: Media Matters

Project Leader and Institution
Elissa Yancey, University of Cincinnati

Partners/ Key Personnel and Institutions
Erin Haynes, Dr, PH, University of Cincinnati
Lisa Groh, University of Cincinnati
Megan Parin, University of Cincinnati

Project / Grant Number
R03 HD059615

PEPH Program
Partners in Research

Brief Project Description
We developed a online module for scientists on how to communicate their science to journalists. The module covers the importance of working with journalists, common ground between scientists and journalists, and important distinctions. Specific tips are given to scientists on how to communicate and interact with journalists in order to best communicate their research.

Audiences
Health Care Providers
Researchers
Public Health Professionals

Key Successes/ Outcomes
The primary success of this project is training provided for research scientists to facilitate their positive interactions with journalists.

Key Approaches that led to success
Collaboration with a journalists both from the academic setting and community setting were essential in the development of the content. The content converted to an online module by a professional writer/web designer.

Obstacles/ Challenges
The primary challenge was the time involved in coordinating the event.

Communication Materials

Title	Format	Willing to share product?	In the RC?
Media Matters: An Online Module for Scientists	Online Module	Yes	Pending
Media Matters: Handout	1-page handout	Yes	Yes

Funding sources for this project
R03 HD059615
R01ES016531

Educating Physicians & Public Heath professionals in communications and the media

Project Leader and Institution
Edward Emmett, MD, MS University of Pennsylvania

Partners/ Key Personnel and Institutions
COEC, Center of Excellence in Environmental Toxicology, University of Pennsylvania
Dr Philip Lewis, Rohm & Haas Company and Saints Theodore and Frances Preventive Medicine Philadelphia, PA
George Bochanski, Rohm & Haas Company and Children's Hospital of Philadelphia

Project / Grant Number

PEPH Program
EHS Core Centers

Brief Project Description
An ~ 4 hour educational experience using a TV studio and media personnel.Commences with Talk Show format involving groups of 3-4 trainees at a time. Videotaped with instructional feedback.Didactics, principles of communication. message development and comfort zones.Structured videotaped role-playing exercises, with playback, feedback and class discussion.Viewing examples of interviews on environmental health related matters with critiques.

Audiences
Health Care Providers
Researchers
Educators
Public Health Professionals
Policy Makers
Media/Journalist

Key Successes/ Outcomes
Trainees comfort with and participation with media. Evidence of understanding interests, points of view of diverse audiences. Improved oral communication skills. Extremely positive student evaluations

Key Approaches that led to success
Collaboration with senior media personnel assisting in educational experience. Curriculum and program developed in advance.

Obstacles/ Challenges
Availability of TV-style studio

Communication Materials

Title	Format	Willing to share product?	In the RC?
Curricular description Being Developed		Yes, when available	Not currently

Funding sources for this project
NIOSH training grant
Corporate donation of time and studio facilities

African Americans and Environmental Cancers: Sharing Histories to Build Trust

Project Leader and Institution
Dr. Marie Lynn Miranda, Children's Environmental Health Initiative, Duke University
Dr. Victoria Seewaldt, Duke Comprehensive Cancer Center, Duke University

Partners/ Key Personnel and Institutions
Triangle Chapter of the Sisters Network, Inc.
Stephanie Robertson
Valarie Worthy
Della McKinnon
Coretta Miller
Eugenia Millender
Melissa Tosiano
Gretchen Kroeger

Project / Grant Number

PEPH Program
ARRA Challenge Grant

Brief Project Description
African American women have a significantly higher chance of dying of breast cancer compared to Caucasian women. The REACH Project focuses on Reaching, Educating, and Advocating to Change Health among high risk African American families. We are surveying 900 African American women to learn more about their understanding of environmental contributors to breast cancer, barriers to accessing the healthcare system, and how to partner across the community and healthcare system. We hope to use what we learn from the surveys to contribute to work being done to reduce the death rate of African American women from breast cancer.

Audiences
Health Care Providers
Researchers
Educators
Public Health Professionals
Community Residents/Groups

Key Successes/ Outcomes
1. Partnerships with trusted organizations,
2. Community listening sessions,
3. Community collaborations able to provide groundwork for health education, and
4. A survey tool able to gather the histories of 900 women.

Key Approaches that led to success
Our key successes are due to our community-based participatory research model and the strong collaborations and partnerships we formed prior to beginning our development and implementation phases of this project.

Obstacles/ Challenges

Communication Materials

Title	Format	Willing to share product? In the RC?

Funding sources for this project

The Little Hocking That Could: Partnership between the University of Pennsylvania and the Decatur Community Association

Project Leader and Institution
Edward Emmett, MD, University of Pennsylvania

Partners/ Key Personnel and Institutions
1) University of Pennsylvania
2) Decatur Community Association (David Freeman Trustee)
3) Dr. Hong Zhang
4) Dr. Nancy Rodway

Project / Grant Number
Grant ES12591 from the Environmental Justice Program and grant 1 P30 ES013508-01A1 from the National Institute of Environmental Health.

PEPH Program
EHS Core Centers
Worker Education and Training Program
Research to Action

Brief Project Description
In 2002, Dr. Zhang, a PENN resident working in Parkersburg, West Virginia and Dr. Emmett learned that C8 was contaminating water of the Little Hocking Water Association (LWHA) in Southeastern Ohio. The C8, a chemical not found in nature, came from a production facility in nearby West Virginia. EPA declared C8 a probable human carcinogen and is concerned that it may delay childhood development. Concern in the LHWA about effects of C8 was heightened by various information disparities between the community, regulators and industry. In response, PENN, the local community, and the local physician Dr. Zhang formed an Environmental Justice partnership which obtained funding for an independent community-based participatory research study to determine 1) if levels of C8 were elevated in the blood of LHWA residents, 2) whether the source of C8 was from air, water, or elsewhere and 3) if there were any short-term health effects. The study found that C8 levels in residents were far above normal, and highest in children and the elderly. The major source of C8 was residential drinking water --C8 in the air did not play a role. On the day of the Community Meeting to report detailed results, DuPont announced it would supply free bottled water to LHWA water users. 78% of eligible households accepted this offer. In late 2006, we performed a follow-up study of 65% of the original participants. Over 90% had made some change in their water supply, and C8 levels had fallen an average of 25%. The community was empowered.

Audiences
Health Care Providers
Researchers
Educators
Public Health Professionals
Community Residents/Groups
Policy Makers
Media/Journalist

Key Successes/ Outcomes
This project has resulted in numerous demonstrated results:
1) Showing that the major source of human exposure to C8 was through public and private water sources;
2) Identifying that levels were highest in children and elderly in the community;

3) Provoking the voluntary offer of free bottled water for use whenever water is ingested to substitute for public water supplies contaminated with C8;
4) Stimulating a very high proportion of residents to accept the bottled water offer or to make other changes in their residential water source, as shown by our follow-up survey;
5) Reduction in C8 emissions from the plant during the period of our partnership;
6) Empowerment of a small rural community.

Key Approaches that led to success

1) Open processes, in which anyone living in the community could participate,
2) Open and regular communication with the community through multiple channels (meetings, newsletter and website with the community)
3) Independent funding, avoiding any commitments to or support from parties that may have vested interests in the outcome.
4) Working together focused on an important task, for the common good.
5) Bringing complementary skills and knowledge to bear on the issues at hand.
6) Mutual respect for each others skills and roles.
7) A partnership of equals, composed of three parties with equally important roles and responsibilities.
8) A community-first attitude.
9) Trust within the community developed over time through open processes, independence from vested interests, and respectful professional behavior by the parties.

Obstacles/ Challenges

1) serious information and power inequities that existed between the community, the polluter, and government agencies
2) community's long-standing bias and distrust of other stakeholders
3) privacy of health data
4) low socio-economic status of community

Communication Materials

Title	Format	Willing to share product?	In the RC?
Community Exposure to Perfluorooctanoate:Relationships Between Serum Levels and Certain Health Parameters	Article published in JOEM	Yes	Submitted
Community Exposure to Perfluorooctanoate: Relationships Between Serum Concentrations and Exposure Sources	Article published in JOEM	Yes	Yes
Development and Successful Application of a "Community-First" Communication Model for Community-based Environmental Health Research	Article published in JOEM	Yes	Submitted
Community First Communication: Reversing Information Disparities to Achieve Environmental Justice	Article published in EJ	Yes	Submitted

Funding sources for this project

Grant ES12591 from the Environmental Justice Program
Grant 1 P30 ES013508-01A1 from the National Institute of Environmental Health

The University of Kentucky Superfund Research Program/ Kentucky Department for Environmental Protection Research Translation Seminar Series.

Project Leader and Institution
Stephanie Jenkins, University of Kentucky Superfund Research Program (UK-SRP) Research Translation Core

Partners/ Key Personnel and Institutions
Anna Goodman Hoover, UK-SRP Research Translation Core
Dr. Lindell Ormsbee, Core Leader, UK-SRP Research Translation Core
KENTUCKY DEPARTMENT FOR ENVIRONMENTAL PROTECTION (KDEP)
Seminar Planning Committee Members:
Tim Hubbard, Assistant Director, Division of Waste Management
Shawn Cecil, Branch Manager, Superfund Branch
Jerri Martin, Supervisor, Risk Assessment

Project / Grant Number
NIEHS Grant #P42 ES007380

PEPH Program
Superfund Research Program

Brief Project Description
The University of Kentucky Superfund Research Program (UK-SRP) Research Translation Core/Kentucky Department for Environmental Protection (KDEP) Seminar Series provides a bridge between state government practitioners and innovative scientific research. Seminar topics have included such topics as Environmental Justice, Mercury Stabilization, Vapor Intrusion, Risk Communication, and Wastewater Treatment. Audiences are comprised of personnel from the Division of Hazardous Waste - Superfund Branch, the Division of Air Quality, the Division of Waste Management, the Cabinet for Health and Family Services, the Division of Water, and other state agencies.

Audiences
Researchers
Educators
Public Health Professionals
Policy Makers

Key Successes/ Outcomes
--Fosters dialogue between UK-SRP and state environmental protection and public health personnel, leading to additional collaborative ventures
--Places the latest research outcomes in the hands of policymakers, promoting the speedy and efficient translation of research into policy and practice
--Evaluation forms provide opportunities for attendees to assess the value of each session and provide input into future presentation topics
--Provides an outlet for UK-SRP graduate students and postdoctoral scholars who participate in the RTC's communication training program to present to an applied audience

Key Approaches that led to success
A joint planning committee comprised of UK-SRP and KDEP personnel insures that seminar topics and speaker expertise align with areas of concern for state regulators. UK-SRP does not rely solely on its own researchers to address these

areas of concern but brings in expert speakers from across and outside of the university, including US EPA and Brown University's SRP.

Obstacles/ Challenges

Identifying expertise that aligns with KDEP areas of concern can be challenging at times. Logistics -- including scheduling speakers at certain times of years -- can also be challenging.

Communication Materials

Title	Format	Willing to share product?	In the RC?
Some presentations are available online.* *All presentations should be online by Jan. 2012.	http://disl.uky.edu/seminars	Yes	No
Audience Questionnaire	MS Word	Yes	No

Funding sources for this project

NIEHS Grant #P42 ES007380

Understanding the Impact of the Environment on Lung Health

Project Leader and Institution
Co Directors: Stanley J. Szefler, MD, and Lisa Ciccuto, PhD, RN

Partners/ Key Personnel and Institutions
Krysten Crews, MPH, National Jewish Health
Nathan Rabinovitch, MD, National Jewish Health
Melanie Gleason, PA, National Jewish Health
Ronina Covar, MD, National Jewish Health
Cristina Colmenero, National Jewish Health
Maria Bracamontes, National Jewish Health
Maryann Ceballos, National Jewish Health
Community Advisory Board Members:
Julie Marshall, PhD - University of Colorado School of Public Health
Bridget Beatty, MPH - Health Specialist, Denver Public School System
Teresa Coons, PhD, Colorado Air Quality Control Commission
Steve McCannon, PhD - Program Manager, regional Air Quality Council
Mark Anderson, MD - Denver Health and Pediatric Environmental Health Specialty Unit
Alicia Aalta, Denver EPA

Project / Grant Number
National Institute of Environmental Health Sciences/Environmental Protection Agency. 1 P01 ES018181, Childhood Environment and Health Center Grant (CEHC)

PEPH Program
Childrens Environmental Health Centers

Brief Project Description
A priority of the Center is to target Colorado youth and their schools to share the latest evidence about the impact of the environment on human lung health. Through conversations with educators and community members, we recognize that it is crucial that Colorado youth learn about environment and lung health using a problem-based, inquiry framework where critical thinking skills are developed to guide future informed behavior. Our goal is to engage students to explore their environment as they learn about air quality and environmental exposures that can affect lung health. The investigational priorities of the Center include air pollution with an emphasis on ozone and particulate matter, and exposure to endotoxin. Endotoxin is a toxin present inside a bacterial cell and released when the cell disintegrates, and sometimes causes symptoms of illness or disease. Thus far, we have reviewed more than 20 science based environmental programs from across the country and over 200 individual lesson plans for grades K-12. Based on our review, we have identified lesson plans that we think fit within the Center's priorities and goals that will engage and challenge students. We understand that most schools have moved away from student memorization of facts to a curriculum based on student inquiry and critical thinking skills such as posing questions, collecting data or information, analyzing, interpreting and appraising information and data, and suggesting next steps and future actions. Our review of the lesson plans to identify the best available ones included the use of an inquiry approach, the linking of lung health to environmental exposures, easy to use, and based on current understanding and resources. In addition, lesson plans and identified objectives were cross-referenced with CSAP standards and the Colorado Department of Education Curriculum Standards. We feel that these are the best lesson plans available to teach students about the environment and engage students in inquiry based investigations while still preparing them for the CSAP.

Audiences
Researchers

Educators
Public Health Professionals
Community Residents/Groups

Key Successes/ Outcomes

We have established an outstanding Community Advisory Board that consists of key individuals in the community. In addition, outreach is a good learning experience for the Center scientists and has been taken seriously by all investigators and Center leadership. The community is clearly on board and a good relationship has been established. We have also established an excellent external advisory board that has provided valuable feedback in our progress. We plan to develop and implement curriculum support materials related to air quality such as ozone, diesel, particulate matter, and endotoxin. With this curriculum, we would like students to develop a skill set of critical thinking within the area of the environment and lung health.

Key Approaches that led to success

The Center's personnel have strong ties to stakeholders within the community with good relationships throughout. We have a very active and lively CAB willing to communicate well and ask questions. Specifically, the COTC has outstanding support overall from the Center.

Obstacles/ Challenges

Our challenges include meeting with key school officials to discuss implementation and uptake of lesson plans. We have asked our CAB member, Bridget Beatty, to assist in contacting Science Curriculum Coordinators within the local school district. Understanding how implementation has been established with previous programs has been difficult as this has not been a priority for other programs. Development seems to have been the goal for other programs. We need to establish priorities and protocols for how and when to continue with implementation. We need to establish the importance of learning about the environment and its connection to health for educators to understand the importance of teaching the lessons. We need to develop a detailed and up to date work plan for implementation.

Communication Materials

Title	Format	Willing to share product?	In the RC?
We are currently in development of a resource guide that will describe the environmental curricula found in our extensive internet search. Our search and lesson evaluation process will be described in this document.	PDF	Yes	To be submitted

Funding sources for this project

Biology-Environmental Health Science Nexus: Inquiry, Content, and Communication

Project Leader and Institution
David Petering, Ph.D., University of Wisconsin-Milwaukee
Craig Berg, Ph.D., University of Wisconsin-Milwaukee

Partners/ Key Personnel and Institutions
Michael Carvan, Ph.D., University of Wisconsin-Milwaukee
Henry Tomasiewicz, Ph.D., University of Wisconsin-Milwaukee
Daniel Weber, Ph.D., University of Wisconsin-Milwaukee
Renee Hesselbach, M.S., University of Wisconsin-Milwaukee
Barbara Goldberg, Evaluation Consultant, Barbara Goldberg & Assoc.

Project / Grant Number
1R25RR026299-01

PEPH Program
EHS Core Centers

Brief Project Description
Through a Science Education Partnership Award (SEPA) grant, we have developed an inquiry-based program for high school environmental science and biology students. The objective of the program is to provide students with multiple, integrated opportunities to conduct authentic experiments that link biological concepts with environmental health issues. The aim is for students to learn through the process of scientific discovery, thereby gaining not only specific knowledge and interest in biomedical science, but also to begin to acquire the critical skills necessary to effectively assess and understand the empirical world. Specifically, students study the effects of various environmental agents on zebrafish embryo development, earthworm behavior, and fathead minnow reproduction, which serve as models for human health effects. Integrated in the modules are opportunities for students to write peer review research papers, communicate their results within and between science classes, and participate in an annual student research conference modeled after the format used in professional society meetings where they convey their findings via oral presentations and posters. At this conference, professional scientists, community members, and university graduate students are in attendance and also share their knowledge in the poster session. By this process, students have a unique opportunity to personally interact with researchers and community leaders in a professional manner. Teachers are provided with in-depth professional development experiences through a comprehensive summer training workshop, and year-long scientific and educational support by UWM faculty and scientists from the NIEHS Children's Environmental Health Sciences Core Center. The summer workshop has 3 goals: 1) to provide a mini-course in environmental health concepts, 2) to engage the teachers in a hands-on experience with the modules they will be using with their students, and 3) to develop the pedagogical skills necessary for completion of the standards-based experimental modules. Inherent to the program is the systematic evaluation process to assess the various facets of the project.

Audiences
Educators
Community Residents/Groups

Key Successes/ Outcomes
The first year of the UWM SEPA program experienced numerous successes, confirmed through various formative and summative evaluation tools administered throughout the year. The 2010 SEPA Teacher Workshop received high marks from the thirteen participants, with 92% of participants rating the workshop as “excellent” or “very good.” Participants reported “connections to scientists,” a “heightened awareness of environmental health,” and a “new curriculum that provides hands-on, relevant lab activities” as the most valuable aspects of what they learned at the workshop. In

addition, the SEPA Student Conference also received strong feedback. Of the students who participated in the first conference, 82% of students “strongly” or “somewhat” agreed that the conference was well organized, 79% of students “strongly” or “somewhat” agreed that the conference was worth their time and effort to participate. For the first year of the UWM SEPA program, a total of 656 students participated in the program. Summative evaluation results from these students and teachers are currently being compiled.

Key Approaches that led to success

To ensure the success of the teachers in utilizing the modules during the school year, an intensive week-long teacher training workshop is required. Teachers are provided with a diverse array of workshop components to significantly enhance their understanding and skills in conducting and leading inquiry-based science experiments. In addition, we provide full scientific, educational, financial, technical, and logistical support throughout the school year so teachers have continuous access to staff expertise in science and education as well as necessary resources to be successful with their students.

Obstacles/ Challenges

During the first year of the UWM SEPA program, we found recruitment and retention of new teachers to be a challenge. Of the thirteen initial teachers, ten teachers followed through with the program during the school year. Increased recruitment efforts were employed for the second teacher workshop, and resulted in eighteen new SEPA teachers. In addition, an Outreach Specialist was hired to assist with communication and support for the SEPA teachers throughout their participation in the program. A second challenge we experienced was the number of participants at the student conference was lower than expected. To promote and increase interest in next year's student conference, a DVD of the conference was made and distributed to participants at the 2011 summer workshop, and time was specifically devoted to communicating the importance of the conference to the goals of the SEPA program. A final challenge we experienced was in teachers being able to produce sufficient numbers of zebrafish eggs to conduct the zebrafish investigation. To meet this challenge, program scientists delivered eggs to teachers and significantly improved the zebrafish husbandry component of the workshop.

Communication Materials

Title	Format	Willing to share product?	In the RC?
Zebrafish as Models: Studying the Effects of Environmental Agents on Human Health	Module (Content)	Yes	No
The Neuro-Muscular Basis of Earthworm Movements: Effects of Physical and Chemical Environmental Agents	Module (Content)	Yes	Yes
Earthworm Burrowing: A Model for Chemical Effects on Locomotion	DVD	Yes	No
Integrating Physiology and Behavior: Using Fathead Minnows to Model the Effects of Environmental Agents	Module (Content)	Yes	No
Fathead Minnow Reproductive Behavior, and Frog Development	2 DVDs	Yes	No
Environment-Health Continuum and Connections	Teacher Workshop Course (PPT)	Yes	No
2011 Student SEPA Conference	DVD	Yes	No
Children's Environmental Health Sciences Core Center SEPA Program	Website	Yes	No
Professional Development Teacher Workshop	Recruitment Brochure	Yes	No
Below the Surface: Safe Fish Consumption (Hmong Community)	DVD	Yes	No
Nindamwaa Giigoon: An Anishnaabe Guide to Eating Fish (Native American Community)	DVD	Yes	No
2010 SEPA Summer Teacher Workshop Evaluation Report and 2011 SEPA Student Conference Evaluation Report and Tool	Reports and Evaluation Tool	Yes	No

Funding sources for this project

NIEHS
NCRR

Healthy Homes Concepts Trainings

Project Leader and Institution
Katrina Korfmacher, PhD, Deputy Director
Valerie George, Program Manager, University of Rochester Environmental Health Sciences Center, Community Outreach and Engagement Core

Partners/ Key Personnel and Institutions
Monroe County Department of Public Health

Project / Grant Number

PEPH Program
EHS Core Centers

Brief Project Description
This two-year project is funded as a healthy homes outreach component under the Monroe County Department of Public Health HUD Lead Hazard control grant. This program uses a "train the trainer" model to build capacity for local organizations to provide healthy homes information thoughout the community. Training sessions focus on teaching individuals how to find and fix hazards in the home, and to provide information for reaching additional resources in the community. Trainings consist of a one- to two-hour powerpoint presentation that provides an overview of common home environmental health hazards, framed around the National Center for Healthy Housing's 7 Core Principals. Specific concepts covered in the training are healthy housekeeping, lead hazards, indoor air quality, asthma, and integrated pest management (including bed bugs). Participants are taught how to identify and address these hazards, and are given several resources for additional information/services in the community. Interactive discussions and hands-on activities and displays are used to help participants visualize solutions, and learn how to use their own existing knowledge and home practices to safely and effectively address home health hazards.

Audiences
Health Care Providers
Public Health Professionals
Community Residents/Groups

Key Successes/ Outcomes
We have trained over 1400 people since January 2010, and have reached many more. From the beginning we focused on reaching out to as many organizations as possible, focusing on those who directly provide environmental-health related services or conduct home visits. We have also trained many groups of community residents directly, including refugee families. Each training is tailored to the specific audience, focusing more heavily on identified environmental health risks. For example, we trained staff members at an emergency residential program for young mothers, and focused the training on reducing lead hazards because it was identified by the group as a topic of particular concern. We have also trained County Health Department staff and inspectors, City inspectors, WIC nutritionists, Neighborworks Rochester instructors, Environmental Educators and other service providers in this information. Many of these organizations have incorporated healthy homes into their own programs and agendas. Evaluation data has not yet been analyzed; however, open-ended evaluation responses and personal feedback to these training has been overwhelmingly positive. For example, after training a group of city inspectors we were told the information will help inspectors know what to tell families when they point out hazards. "They know asbestos is a hazard and tell the family to get rid of it, but now they'll be able to tell the family how to do it safely." Many positive responses also refer to increased awareness simply of the kinds of hazards that can exist in a home and how to prevent them.

Key Approaches that led to success

Because funding is limited, we thought it was very important to help insure this information was integrated into community programs, thus the focus on a "train the trainer" model. In addition to training community members, we targeted organizations that regularly interact with high risk populations and have the capacity to include this information in their ongoing programs. We were able to work with certain organizations after training their staff to help them find ways to have this information available to their clients/communities. For example, Neighborworks Rochester runs a first time homebuyer's program, and was able to work the full one-hour training into the first class in their series. Some organizations aren't able to work with a full training, so we worked with them to develop "hazard kits" or "modules" for hazard-specific engagement. For example, WIC nutritionists have a unique opportunity to respond to client questions one-on-one, or to produce educational materials related to any number of topics. We provided a kit of specific healthy homes topics for hazards that were likely to come up in WIC conversations - lead, asthma, pest management, and fire safety. The flexibility of being able to work with various organizations throughout the community - all of which reach a different population and have different organizational focus - allowed us to integrate healthy homes information into existing programs to create a sustainable healthy home network within the community. Although we are still conducting trainings, we are confident that when the funding period is over, this information will remain available to community members.

Obstacles/ Challenges

Probably the most significant obstacle to this program's success was logistical details around organizing trainings, particularly when we trained housing professionals. We had decided it would be best to train housing professionals during the lunch hours of required trainings (so time commitment would be minimal for them). We discovered early on that attendance would be low unless we also provided food for these particular trainings. This boosted participation, but increased logistical issues for ordering and delivering food on short notice (we settled on pizza), and for conducting trainings in a timely manner (we were limited to one hour, or sometimes even half an hour, during these breaks). Because of these issues, having the instructors on board/in support of these trainings was essential. In some cases, it was difficult to find organizations that had the time and capacity to not only have their staff trained, but to incorporate the information into their existing programs. Particularly at a time when most budgets are being cut, many people see taking on this information as added work. Providing ample resources and being available to answer questions and work with agencies on their own schedules (flexibility with meeting and training times) was essential. Scheduling, logistics, travel and the training itself required a major time commitment. We were able to hire a summer intern to conduct community trainings and develop a shortened, one-on-one version for health fairs. Likewise, we were able to contract a healthy homes professional to arrange and conduct community trainings on our behalf (this individual did not need to be trained, saving a significant amount of time for the program manager).

Communication Materials

Title	Format	Willing to share product?	In the RC?
Healthy Homes, Healthy Families: A Guide to Protecting Your Family's Health by Reducing Environmental Hazards in Your Home	Information Booklet	Yes	Yes
Environmental Health Sciences Center: Healthy Homes	Website	Yes	Yes
Resources and hazard-specific handouts	Handouts	Yes	No
How Healthy is My Home? (English and Spanish)	Brochure/Survey	Yes	Yes

Funding sources for this project

Monroe County Department of Public Health (contracted through a HUD Lead Hazard Control Grant).

Linking Breast Cancer Advocacy and Environmental Justice

Project Leader and Institution
Julia Brody, PhD, Silent Spring Institute

Partners/ Key Personnel and Institutions
Ruthann Rudel, Silent Spring Institute
Nile Malloy, Communities for a Better Environment (CBE)
Rachel Morello-Frosch, University of California, Berkeley
Phil Brown, Brown University

Project / Grant Number
5R25ES013258-04

PEPH Program

Brief Project Description
This project linked breast cancer advocacy and environmental justice through a collaboration of Silent Spring Institute, Communities for a Better Environment, Brown University, and University of California, Berkeley. The project assessed household exposure to endocrine disrupting compounds (EDCs) and developed communication tools for reporting results to affected individuals and communities in three locations: Cape Cod, Massachusetts, and Richmond and Bolinas, California.

Audiences
Health Care Providers
Researchers
Educators
Public Health Professionals
Community Residents/Groups
Policy Makers
Media/Journalist

Key Successes/ Outcomes
-Community organizers found the personal contact involved in collecting personal exposure data (indoor and outdoor air and dust samples) helped build relationships, trust, and credibility in the study neighborhood.
-Study results re-energized community activism, supporting CBE's court victory blocking a nearby Chevron Richmond refinery permit request to expand operations and requiring Chevron to conduct cumulative impact assessment.
-CBE staff gained training in human subjects research ethics and data collection.
-The project team helped CBE secure a grant to conduct a follow up health study in Richmond, allowing them to address community members' requests for such a project.

Key Approaches that led to success
-Built on partners' existing relationships and strengths
-Co-learning/sharing skills among partners (e.g., Silent Spring Institute researchers trained CBE staff to collect household air and dust samples)
-Listened to community concerns
-Adopted a collaborative, iterative process
-Identified shared goals
-Set expectations up front
-Frequent and open communication (e.g., bimonthly team calls, in person meetings, frequent emails)

-Team-building activities (e.g., team dinners, sharing personal updates and accomplishments)

Obstacles/ Challenges

-Conducting research in the context of CBE's advocacy campaign
-Balancing CBE's priorities with project priorities
-Funding

Communication Materials

Title	Format	Willing to share product?	In the RC?
Linking Breast Cancer Advocacy and Environmental Justice	poster	yes	Pending
Linking Breast Cancer Advocacy and Environmental Justice: An Informational Forum and Social Event	flier	yes	yes
Richmond Health Survey & Air Sampling Study Results: An Informational Forum and Social Event	flier	yes	Pending
Household Exposure Study	fact sheet	yes	Pending
Household Exposure Study Chemicals	fact sheet	yes	Pending
Greening Your Cleaning	fact sheet	yes	Pending
Take Action	fact sheet	yes	Pending
Cumulative Impacts: Linking Regional, Local, and Household Air Pollution	community presentation	yes	Pending

Funding sources for this project

NIEHS EJ/CBPR Program

Air Pollution Outreach, Education, and Research Capacity Building in Alaska Native Villages

Project Leader and Institution
Tony Ward, The University of Montana

Partners/ Key Personnel and Institutions
10 Teachers in Rural Alaska
University of Alaska, Fairbanks (Center for Alaska Native Health Resarch)
Alaska Native Tribal Health Consortium
University of New Mexico (Community Environmental Health Program)

Project / Grant Number
1RC1ES018400

PEPH Program
ARRA Challenge Grant

Brief Project Description
We will implement the Air Toxics Under the North Star program into seven schools within rural Alaska Native villages. In addition, we will conduct respiratory health and air pollution surveys within the communities. Our goal is to reduce health disparities of Alaska Natives living in remote villages by raising awareness of indoor air quality issues affecting respiratory health. Students and environmental health personnel residing in these villages will also be empowered to work with their communities to improve air quality, and the overall respiratory health of community members.

Audiences
Educators
Community Residents/Groups

Key Successes/ Outcomes
Successful implementation of our Air Toxics Under the North Star education/outreach program into 9 schools in rural Alaska.

Key Approaches that led to success
Partnerships with teachers and community members.
Establishment of an External Advisory Committee consisting of regional partners.

Obstacles/ Challenges
Communication issues at times.
Institutional Review Boards.

Communication Materials

Title	Format	Willing to share product?	In the RC?
Air Toxics Under the Big Sky Curricular Material	Binder	Yes	Not yet
Air sampler training videos	DVD	Yes	Yes

Funding sources for this project
NIEHS RC1 Challenge Funding

Community Environmental Forum Theatre (Education /Commiunity Capacity-Building)

Project Leader and Institution
John Sullivan (Director: Public Forum & Toxics Assistance, NIEHS CET, University of Texas Medical Branch @ Galveston)

Partners/ Key Personnel and Institutions
Nuestra Palabra:Latino Writers Having Their Say (Houston TX)
Community In-Power & Development Association Port Arthur TX)
Mothers for Clean Air (5th Ward Chapter / Houston TX)
Armand Bayou Nature Center (Pasadena TX)
de Madres a Madres (Houston TX)
Citizens for Environmental Justice (Corpus Christi)
Alton Park / Piney Woods Environmental Health & Justice Collaborative (Chatanooga TN)
Toxic Waste / Lupus Coalition (Buffalo NY)
BISCO (Bayou Interfaith Shared Community Organizing / Thibodaux LA)
LEAN (Louisiana Environmental Action Network / Baton Rouge LA)
CLEAN (Citizens League for Environmental Action Now / Houston TX)
T.e.j.a.s. (Texas Environmental Justice Advocacy Services / Houston TX)
IMPACT Project
MD Anderson / UT NIEHS Center / CRED

Project / Grant Number

PEPH Program
EHS Core Centers

Brief Project Description
Community Environmental Forum Theatre offers communities throughout the Texas / Louisiana Gulf Coast petrochemical belt an opportunity to use the tools of Image Theater and improvisation to analyze and develop a wide range of useful toxicological concepts, to develop a working knowledge of risk, and to develop analytic tools to understand how toxic exposures, risk burdens, and socio-economic factors contribute to environmental justices that severely impact theirfamilies. This “tox, risk & stress” curriculum incorporates basic (qualitative) toxicology concepts, community ethnography, social epidemiology and environmental justice. Forum Theatre is based in the NIEHS CET Community Outreach & Engagement Core Public Forum & Toxics Assistance Division.

Audiences
Health Care Providers
Researchers
Educators
Public Health Professionals
Community Residents/Groups
Policy Makers
Media/Journalist

Key Successes/ Outcomes
Forum projects with community partners in Houston TX (Unidos Contras Environmental Racismo), Corpus Chjristi TX (Citizens for Environmental Justice), and Port Arthur TX (Community In-Power & Development Association) increased the capacity of each organization to deploy education outreach and advocacy campaigns that culminated in real changes in

the quality of life for petrochemical fence line communities. The directors of each of these groups have made a tremendous regional impact in the Gulf winning numerous awards and directly influencing the regulatory process, especially in terms of emissions monitoring, enforcement and the empowerment of their communities.

Key Approaches that led to success

Projects evolved from prior involvement in a variety of community health issues; collaboration with local / regional regulators, health department environmental health practitioners, promotoras, university schools of public health, community-based environmnetal justice advocates; segments of environmnetal theatre have been presented as demonstrations and workshops at a variety of nation / international conferences; networking with Pedagogy & Theatre oif the Oppressed organization.

Obstacles/ Challenges

Fence line community members were eager to learn about air chemistry, and concepts such as cumulative risk, social detreminants of health and risk but were discourage by previous defeats and the health and social / economic effects of cumulative community burdens. Many communities were intially dubious that scientific understanding of their situation would produce tangible benefit.

Securing funding and other support is difficult for educational activities that depart from traditional pedagogy.

Involving community leaders in non-traditional projects - a huge priority for connecting Forum Theatre productions with sustained environmental public health advocacy.

Communication Materials

Title	Format	Willing to share product?	In the RC?
Video clips documenting use of Forum Theatre techniques with EPA Community Involvement Specialists and members of community-base d organizations	Quick Time video / web-based	Yes	Yes
Video documentation of Forum Theatre training with member of de Madres a Madres troupe - El Tearo Lucha por La Salud del Barrio	DVD	Yes	No
Variety of text and web-based articles	print, web - based	Yes	No

Funding sources for this project

Sealy Center for Environmental Health & Medicine Project Budget

SEPs associated with CERCLA site community engagement projects

NIEHS EJ / CBPR Partnerships for Communication (Project COAL - "Communities Organized against Asthma & Lead" - de Madres a Madres project)

Environmental Justice Encuentro Network (Education / Community Capacity-Building / Researcher Capacity-Building

Project Leader and Institution
Consortium Project: SCEHM / NIEHS CET COEC; Air Alliance Houston, T.e.j.a.s.

Partners/ Key Personnel and Institutions
NIEHS CET COEC Direcor: Sharon Croisant, PhD
Air Alliance Houston, Executive Director: Matthew Tejada, PhD.
T.e.j.a.s. (Texas Environmental Justice Advisory Services. Direcotor: Juan Parras

Project / Grant Number

PEPH Program
EHS Core Centers

Brief Project Description
Environmental Justice Encuentro Network: The Community Science Workshop (CSW) was launched in 2008 as a central feature of Sealy Center for Environmental Health and Medicine and Center for Environmental Toxicology Environmental Justice Encuentro Network. Our annual Encuentro conference primes the collaborative activities of the CSW and serves as a locus for translational education, and a hub for networking among researchers, community-based public health organizations and environmental justice advocates. The Encuentro network fosters working relationships modeled on the NIEHS Partnerships for Environmental Public Health model emphasizing coordination of existing initiatives and resources focused on cross-sectorial environmental health collaborations among regional stakeholders and Center science, and the development and evaluation of innovative educational / risk communication tools.

Audiences
Health Care Providers
Researchers
Educators
Public Health Professionals
Community Residents/Groups
Policy Makers
Media/Journalist

Key Successes/ Outcomes
1) Connected NIEHS Center with activities of regional environmental health / ecosystem advocates,
2) increased community capacity: builds knowledge base bi-directionally, promotes community inclusion & meaningful participation, preparation for future community-based Partnerships in Environmental Public Health;
3) incubation of community-science collaborations resulting in funded proposals (“Gulf Coast Health Alliance: Risks and health outcomes associated with the Macondo Spill," Gulf Coast Secure Center Cumulative Risk Project (Port Arthur TX), EPA-funded IAQ project in West Port Arthur (“Promoting Healthy Homes in an EJ Showcase Community").

Key Approaches that led to success
1) Transparent, open, collaborative Encuentro planning process that incorporates inoput and identiofied needs across the network,
2) Combination of instructional modalities, panel discussions, excursions to environmnetal justice communities, and wide range of speakers,
3) open admission network policy for new organizations,
4) network supported technical / organizational help for new and exsting organizations,

5) skill building workshops using traditional and popular education-based pedagogy.

Obstacles/ Challenges

1) Logistics - the region comprises 4 states (TX, LA, MS, AL) and staying connected is always challenging,
2) Funding - needs are diverse and funding entities desire the most unified thematic approach for conference, and are often biased in favor of direct action, or sustained campaigns,
3) Balancing the objective requirements of science and the action-orientation of communities with urgent needs,
4) Leading edge presentations of new material vs. sustained focus on difficult, long-term issues within the network,
5) Special Logistics / Permissions along routs of "Toxic Tours."

Communication Materials

Title	Format	Willing to share product?	In the RC?
power point	web-based	Yes	Yes

Funding sources for this project

Sealy Center for Environmental Health & Medicine
Center to Eliminate Health Disparities / UTMB
in-kind: Air Alliance Houston, T.e.j.a.s.

Of Mice and Women: Modeling Breast Cancer and the Environment

Project Leader and Institution
Robert A. Hiatt, MD, PhD, University of California San Francisco and the Helen Diller Family Comprehensive Cancer Center at the University of California San Francisco. Director of the former Bay Area Breast Cancer and the Environment Research Center

Partners/ Key Personnel and Institutions
Mary Helen Barcellos-Hoff, PhD, New York Unversity Langone Medical Center
Janice Barlow, Zero Breast Cancer

Project / Grant Number
This project is supported by Award Number U01 ES012801 from the National Institute of Environmental Health Sciences and the National Cancer Institute.

PEPH Program
Breast Cancer and Environment Research Program

Brief Project Description
One major aim of the BABCERC and of its COTC is to disseminate research findings and the current state of the science in this area back to the community. In this project, we developed a video to describe why and how different types of mouse models are used in experimental animal studies to study breast cancer biology. The main take home point of the video is mice models provide enormous contributions to understanding the fundamental biology of breast development. In mice models, researchers can isolate, “turn on or turn off”, biological processes to understand individual environmental exposures that may or may not contribute to abnormal tissue growth. The goal of using mice models is to increase our understanding of the fundamental aspects of breast biology. This understanding allows specific molecular markers to be developed to identify a woman's risk of developing breast cancer, as well as specific molecular targets to be identified that might provide a strategy for chemoprevention. By identifying specific molecular targets, non-invasive biomarkers can be identified that could be used in a woman's visit to her doctor's office to provide information about a woman's risk of developing breast cancer. And for all this, women can thank mice.

Audiences
Researchers
Educators
Community Residents/Groups
Media/Journalist

Key Successes/ Outcomes
One key success for this project was the development of the comprehensive scientific glossary to accompany the DVD. Another success was the partnership with University of California TV (UCTV) which has broadcast the video nationally and has, to date, been viewed over 22,000 times since it aired in March 2011. Over 100 hardcopies of the educational toolkit have been disseminated to the public. Another success was the article written by Tanya Tillett in Environmental Health Perspectives titled Beyond the Bench: Of Mice and Women.

Key Approaches that led to success
A key approach that led to the success of the educational toolkit Of Mice and Women includes the interdisciplinary team that helped develop the video and their high level of engagement in the project. Another key approach includes leveraging partnerships to disseminate and broadcast the video to a wide audience.

Obstacles/ Challenges

One challenge that remains is how to present this information in a way that is culturally appropriate for different populations who may benefit the most from these new findings and information.

Communication Materials

Title	Format	Willing to share product?	In the RC?
Of Mice and Women: Modeling Breast Cancer and the Environment	DVD and scientific glossary (also online)	Yes	Yes

Funding sources for this project

This project is supported by Award Number U01 ES012801 from the National Institute of Environmental Health Sciences and the National Cancer Institute.

Enhance Capacity of Susceptible Populations and Public Health Practitioners to Understand Environmental Health Risks in Homes

Project Leader and Institution
Kathleen Gray, DirectorCommunity Outreach and Engagement Core, UNC Center for Environmental Health and Susceptibility

Partners/ Key Personnel and Institutions
Key Personnel: Kathleen Gray, Carolyn Crump, Neasha Graves, Amy MacDonald; Community Outreach and Engagement Core, UNC Center for Environmental Health and Susceptibility
Partners: Kinston Community Health Center, Rogers Eubanks Neighborhood Association, Community Care of North Carolina (Northern Piedmont region), Durham Affordable Housing Coalition, Guilford County Health Department, Center for New North Carolinians at UNC Greensboro, NC DHHS Division of Public Health, NC Department of Environment and Natural Resources, National Center for Healthy Housing

Project / Grant Number
Funding from NIEHS (P30 ES010126)

PEPH Program
EHS Core Centers

Brief Project Description
In the past year, the UNC CEHS COEC launched a "Healthy Homes Train the Trainer" initiative, drawing on CEHS and other current environmental health research from NIEHS-funded Centers. This initiative included working with national, state and local leaders to develop interactive and engaging sessions on environmental health in the home to build capacity among environmental and health professionals working with vulnerable populations across North Carolina. Drawing from the National Center for Healthy Housing Healthy Homes for Community Health Workers curriculum, COEC staff conducted four one-day trainings in North Carolina's Piedmont, central and southeastern regions. The interactive workshop introduced environmental health and safety issues in the home, trained participants to conduct basic home assessments and prepared them to communicate information clearly and with sensitivity to residents. COEC staff also conducted shorter healthy homes workshops for other health professionals, including environmental health specialists, nurses, and health educators in local, regional and statewide programming, as well as nursing students in at UNC Chapel Hill and NC Central University to introduce environmental health and healthy homes concepts.

Audiences
Health Care Providers
Public Health Professionals

Key Successes/ Outcomes
During 2010-2011, COEC staff trained over 170 health practitioners in healthy homes concepts, providing resources they can use to assess home-based health hazards and educate their clients. Participants included community health workers in a refugee education program, housing advocates, environmental health specialists, asthma program coordinators, employees of regional community health networks that provide services for low-income populations, and nursing students. As a result of our trainings, community health workers in at least three counties in the Piedmont and southeastern areas of North Carolina have been applying their healthy homes knowledge and using COEC resources to conduct home assessments and educate their clients on home-based health hazards.

Key Approaches that led to success
The UNC CEHS COEC has utilized a train-the-trainer approach to educate health care providers and public health professionals to identify and address home-based health hazards in the communities they serve. Along with training

professionals, the COEC staff developed a six-minute video highlighting healthy homes concepts, a home assessment tool created in partnership with the NC Department of Environment and Natural Resources (NCDENR), hands-on learning activities for youth and adults, client fact sheets and instruction on applying health education concepts. The COEC staff tailored trainings and materials to accommodate different professionals and the lay audiences with whom they are working. The COEC also had success in developing partnerships with state and national programs (NC DENR and National Center for Healthy Housing) to develop and implement these tools.

Obstacles/ Challenges

One of the COEC's primary challenges is ensuring that health professionals are utilizing lessons and tools to educate clients about ways to prevent and eliminate home health hazards, either through their own trainings or other one-on-one contact. Further, the COEC seeks behavior change among lay audiences, but it is difficult to document and measure such changes. To address this challenge, COEC staff is actively working to improve response rates on follow-up evaluations with workshop participants and the audiences they serve.

Communication Materials

Title	Format	Willing to share product?	In the RC?
Uncovering Hidden Hazards in Your Home	DVD/Video	Yes	Yes
Healthy Homes for Community Health Workers	7-hour training	module is on National Center for Healthy Housing website	
5 Steps to a Healthy Home (English/Spanish)	fact sheet	Yes	
Green Cleaning Fact Sheet (English/Spanish)	fact sheet	Yes	
Facts About Lead (English/Spanish)	fact sheet	Yes	
Lead and Your Child's Eating Habits (English/Spanish)	fact sheet	Yes	
Lead-Safe Toys for NC Children (English/Spanish)	fact sheet	Yes	

Funding sources for this project

National Institute for Environmenal Health Sciences (P30 ES010126)
Multi-year contract with the Children's Environmental Health Branch in the NC Department of Environment and Natural Resources

The Breast Biologues: A biology dialogue about breast cancer and the environment

Project Leader and Institution
Robert A. Hiatt, MD, PhD, University of California San Francisco and the Helen Diller Family Comprehensive Cancer Center at the University of California San Francisco. Director of the former Bay Area Breast Cancer and the Environment Research Center

Partners/ Key Personnel and Institutions
Zena Werb, PhD, University of California San Francisco and the Helen Diller Family Comprehensive Cancer Center at the University of California San Francisco, Project Leader of Environmental Effect on the Mammary Gland across the Lifespan
Paul Yaswen, PhD, Lawrence Berkeley National Lab
Mary Helen Barcellos-Hoff, PhD, New York Unversity Langone Medical Center
Lori Schkufza, Gutter Rabbit
Janice Barlow, Zero Breast Cancer
Casandra Aldsworth, Zero Breast Cancer

Project / Grant Number
This project is supported by Award Number U01 ES012801 and U01 ES01945 from the National Institute of Environmental Health Sciences and the National Cancer Institute.

PEPH Program
Breast Cancer and Environment Research Program

Brief Project Description
One major aim of the BABCERC and of its COTC is to disseminate research findings and the current state of the science in this area back to the community. In this project, we developed a 15-minute video that incorporates time-lapse imaging and explains how the normal breast develops and how exposures to potential cancer causing chemicals during specific points of development might influence future breast cancer risk. It has also been made into a comic book, available in both English and Spanish.

Audiences
Researchers
Educators
Community Residents/Groups
Media/Journalist

Key Successes/ Outcomes
One key success for this project was the partnership with University of California TV (UCTV) which has broadcast the video nationally and has nearly 20,000 views since it's airing date in February 2011. We also have the video posted on Vimeo, an online video sharing website, and there have been 344 views of the video since it was uploaded in November 2010. To date, we have disseminated 150 of the Breast Biologues DVDs, 290 of the Breast Biologues English comic books and 353 of the Breast Biologues Spanish comic books. The Breast Biologues has won an Award of Distinction from the Communicator Awards and a Bronze Telly Award. It has been well received by the community and is being used currently to conduct education and outreach with Spanish cancer support groups and general breast cancer support groups. It is also being shared at community events, presentations, and health fairs throughout California.

Key Approaches that led to success
Key approaches that led to the success of The Breast Biologues includes the interdisciplinary team that helped develop the video and their high level of engagement in the project. Another key approach includes leveraging partnerships to disseminate and broadcast the video to a wide audience.

Obstacles/ Challenges

One challenge that remains is how to present this information in a way that is culturally appropriate for different populations who may benefit the most from these new findings and information.

Communication Materials

Title	Format	Willing to share product?	In the RC?
The Breast Biologues: A biology dialogue about breast cancer and the environment	DVD and narrative comic book (English and Spanish) available online	Yes	Yes

Funding sources for this project

This project is supported by Award Number U01 ES012801 and U01 ES01945 from the National Institute of Environmental Health Sciences and the National Cancer Institute.

Partnerships for the Dissemination of New Results (PARDNER)

Project Leader and Institution
Robert A. Hiatt, MD, PhD, University of California San Francisco and the Helen Diller Family Comprehensive Cancer Center at the University of California San Francisco. Director of the former Bay Area Breast Cancer and the Environment Research Center

Partners/ Key Personnel and Institutions
Lawrence H. Kushi, ScD, Kaiser Permanente Division of Research, Principal Investigator of the CYGNET Study
Julie N. Harris, PhD, Kaiser Permanente Division of Research
Louise C. Greenspan, Kaiser Permanente, San Francisco, CA
Janice Barlow, Zero Breast Cancer

Project / Grant Number
Funded by the National Institute for Environmental Health Sciences Partnerships for Environmental Health (PEPH) Administrative Supplement grant number U 01 ES 012801-07S2

PEPH Program
Breast Cancer and Environment Research Program

Brief Project Description
One major aim of the BABCERC and of its COTC is to disseminate research findings and the current state of the science in this area back to the community. In this project, we developed a novel dissemination strategy with pediatricians as our key target. The goal of the dissemination plan is to educate pediatricians on three topics: basic risk factors for early pubertal development, current trends and cultural/ethnic differences in Bay Area girls' pubertal development, and current geographic differences in levels of key endocrine disruptors that may influence pubertal development. The main goal of this dissemination plan is to increase knowledge for improved clinical decision-making and to assist pediatricians' in discussing this information with their patients. We partnered with Kaiser Permanente's continuing medical education (CME) department to develop a videoconference program that aired on April 2, 2010. We also conducted an evaluation of our videoconference dissemination in order to advance understanding of effective evidence-based dissemination strategies going forward.

Audiences
Health Care Providers
Researchers
Educators

Key Successes/ Outcomes
The videoconference was delivered on April 2, 2010 and was titled, Early Puberty and the Environment. Overall 742 pediatricians or pediatric specialists were emailed as part of the evaluation and invited to participate in the study. The initial email contained a link to the pretest survey through SurveyMonkey. One hundred forty one physicians replied and completed the pre-test survey (Response rate: 19%). One hundred twenty-nine physicians completed survey 2 and 46 physicians completed survey 3. Overall, our videoconference dissemination seems to have produced modest gains in knowledge of endocrine disruptors and risk factors for early pubertal development. Modest improvements in self-efficacy around communicating with patients about environmental risk reduction strategies were also reported at the three-month follow up. While communication practices were not significantly affected, physicians did report increases in intentions to communicate with their patients and their patients' families immediately following the videoconference. However, these increased intentions towards communicating with patients were not sustained over time. Taken together, these findings suggest that the videoconference may have been a useful tool in educating physicians about the current state of the science on the link between the environment and early pubertal development. It should also be

noted that knowledge of clinical and environmental risk factors for early pubertal development was substantial to begin with. On average, physicians were able to correctly identify more than half of the questions pertaining to endocrine disrupting compounds and clinical/sociodemographic risk factors for early pubertal development.

Key Approaches that led to success

The partnership established between Kaiser Continuing Medical Education (CME) and the CYGNET study was fairly unique and contributed to the success of the project. Most Kaiser CME videoconferences are more focused on clinical practice and new techniques in clinical practice. Occasionally the Kaiser CME videoconferences will also disseminate knowledge about clinical trials. This particular videoconference was focused more on epidemiological research and trying to disseminate this relevant population-based research to pediatricians in order to assist them in their clinical practice.

Obstacles/ Challenges

First, this was a small pilot study to determine whether a minimal intervention (i.e. one-time videoconference) was an effective method for disseminating the current state of the science around environmental risk factors for early pubertal development. Our goal was to impact physician knowledge, attitudes, self-efficacy, communication, and referral behaviors. However, the size of this study and the resources devoted to follow-up with physicians may not have been sufficient to effectively detect change in several of these domains. We were limited in terms of space to include additional survey items that may have been able to more thoroughly identify and understand behavior change, knowledge, and self-efficacy. Second, this was a small self-selected sample. Physicians were contacted via email and follow-up was conducted primarily through email channels and our response rate was fairly low (19%). Furthermore, many physicians were lost to follow-up. Studies with physicians often have extremely low response rate and we attempted to overcome this by contacting physicians multiple times, partnering with trusted physicians and information channels (i.e. Kaiser CME, and chief pediatricians), and allowing a long follow-up period. Future studies should incorporate additional more resource-intensive follow-up strategies in order to recruit and retain physicians. Third, response bias is always an issue in studies using measures of physician self-report. Social desirability was likely an issue, particularly with respect to communication behaviors and referral behaviors. Physicians may have reported what they thought was the `desired' behavior instead of their actual behavior. Future research will need to assess self-report in addition to objective measures (such as using chart review to assess referral behaviors both prior to and after intervention). Fourth, we did not assess whether there were differences in response according to sociodemographic factors. It may have been that certain subgroups of physicians responded more or less favorably to the videoconference. Future follow-up research for this project will include subgroup analyses.

Communication Materials

Title	Format	Willing to share product?	In the RC?
References for Early Puberty and Environmental Health	Handout	Yes	Yes
Pediatric Environmental Health Resources	Handout	Yes	Yes
Major Sources of Chemical Exposure and How to Reduce Exposure	Handout	Yes	Yes

Funding sources for this project

Funded by the National Institute for Environmental Health Sciences Partnerships for Environmental Health (PEPH) Administrative Supplement grant number U 01 ES 012801-07S2

EH@Home Workshops - Residential environmental health issues and risk reduction strategies

Project Leader and Institution
Dave Stone, Outreach Core Director, Environmental Health Sciences Center, Oregon State University; Director, National Pesticide Information Center

Partners/ Key Personnel and Institutions
Sandra Uesugi, COEC, EHSC, Oregon State University
Naomi Hirsch, COEC, EHSC, Oregon State University

Project / Grant Number
NIEHS grant P30 ES000210

PEPH Program
EHS Core Centers

Brief Project Description
EH@Home is a 5-hour professional development workshop from the Oregon State University Environmental Health Sciences Center. EH@Home workshops focus on common environmental health concerns found in residential settings. Anyone who works in the residential setting or communicates with the public, older adults, families or parents is welcome to attend. COEC staff presented the latest research findings on key environmental health issues. Workshop participants will be able to recognize common problems, identify risk reduction strategies, and know when to use specialists for further assistance. The workshops were offered free of cost, included lunch, and were held in the middle of the day to allow for 2-3 hours of travel for participants. Target audiences: county health departments, WIC staff, Oregon and Washington Department of Environmental Quality, Oregon Health Authority, OSU Extension faculty, school and public health nurses, child and adult daycare operators, home health aides.

Audiences
Health Care Providers
Public Health Professionals
Community Residents/Groups

Key Successes/ Outcomes
In Spring 2011, COEC staff delivered an updated version of the EH@Home professional development workshops in 4 locations across Oregon: Corvallis, Portland, Medford and Bend. A total of 130 participants attended. This was the 2nd year of this workshop series with updates from 2010. Updates included the most recent findings on residential environmental health risks and incorporation of an interactive electronic clicker system for increased audience participation throughout the workshop modules. The Bend and Medford workshops were attended by public health professionals from many rural and underserved counties in Oregon. The 2011 workshop series received an overall evaluation rating of 4.85 out of 5.

Key Approaches that led to success
Based on the successes and feedback from the 2010 workshop series, we utilized word-of-mouth recruitment and continued to develop local partnerships with county health department staff. These partnerships greatly enhanced our recruiting strategies and strengthened our local connections throughout Oregon. The interactive clickers were very well received, resulting in many participants' positive comments in post-workshop evaluations. We continued the use of Constant Contact, a commercially available email, survey, and event registration system, for recruiting, pre- and post-workshop contact with participants, and ease of event registration. It has proven to be very useful to follow up with participants and market upcoming events. See http://ehsc.oregonstate.edu/ehathome

Obstacles/ Challenges

We had many requests from other rural and coastal communities requesting workshops in their area, but we were unable to offer more than 4 workshops this year due to limited funds and staff time. The need and desire for these workshops across Oregon is great and requests increase with each year of workshop offering. We also received feedback from our participants that despite the desire and applicability to their programs, they did not have the time and travel funds to send more staff to the workshops. Additionally, due to the diverse participant background and stringent requirements for continuing education credit applications, we do not offer any specific continuing education credits outside of Certificates of Attendance. The ability to offer registered CEUs would enhance the workshops as well as be more attractive and justified for those programs with limited time and staffing needing specific CEUs.

Communication Materials

Title	Format	Willing to share product?	In the RC?
Workshop modules: Basics of Environmental Health Indoor Air Quality Chemicals in the Diet Pesticides and Alternatives for Pest Control	Powerpoint slides ehsc.oregonstate.edu/ehathome	yes	Pending

Funding sources for this project

NIEHS grant P30 ES000210

Researching Women's Environmental Health Conference Analysis

Project Leader and Institution
Shaw-Ree Chen (University of Rochester Medical Center)
Emily Barrett (University of Rochester Medical Center)
Shanna Swan (Mount Sinai Medical Center)

Partners/ Key Personnel and Institutions

Project / Grant Number
Partial support from 1R13ES019374-01

PEPH Program

Brief Project Description
The 2010 Researching Women's Environmental Health workshop brought togetherresearchers, doctors, community leaders, media, and policy-makers with a shared interest in obesity, nutrition, and environmental health. The agenda featured talks from five leaders in the field of obesity and environmental health who came from around the country to work on issues of environmental health. We held discussion groups with workshop participants after these talks in such a way that we could identify factors that influenced understanding of research findings as well as motivation to take personal action. We produced a workshop report in which we highlight take-home points from the speakers who talked about environmental health as well as lessons learned from the small group discussions that followed. We use these take-home points as a guide for how we, as scientists and educators, can improve our ability to communicate scientific messages to the public.

Audiences
Health Care Providers
Researchers
Educators
Public Health Professionals

Key Successes/ Outcomes
The success was that we were able to identify factors in communicating about environmental heath that would be likely to increase positive responses in public audiences. This included identifying simple, positive actions that people could take that would address their concerns about environmental chemicals as well as connect to other well known health benefits.

Key Approaches that led to success
We held a number of discussion groups that were designed to capture participant concerns, desired actions and potential barriers and solutions. The open nature of the discussions allowed important themes to emerge amongst participants.

Obstacles/ Challenges
Having collected this data, the next step is to test our model of communication by implementing talks in the community on environmental health issues that adhere to the model and evaluating public response. The challenges to doing this are locating funding that would support the evaluation process, as well as the challenge of meaningfully integrating this model with other models of health behavior change.

Communication Materials

Title	Format	Willing to share product?	In the RC?
Researching Women's Environmental Health 2010 Workshop Report	pdf	yes	Yes

Funding sources for this project
National Institute for Environmental Health Sciences and National Institute for Child Health and Human Development (1R13ES019374-01)
National Institute for Environmental Health Sciences ES01247

Tracking and Analyzing Contaminants in Private Well Water in NC

Project Leader and Institution
Kathleen Gray, MSPH, and Rebecca Fry, PhD, UNC Chapel Hill Superfund Research Program

Partners/ Key Personnel and Institutions
UNC Superfund Research Program: Fred Pfaender, PhD, Marc Serre, PhD, Tracey Slaughter, Kyle Messier, Alison Sanders
Division of Public Health, NC DHHS: Mina Shehee, PhD, Ken Rudo, PhD
State Laboratory of Public Health, NCDHHS: Leslie Wolf, PhD

Project / Grant Number

PEPH Program
Superfund Research Program
ARRA Challenge Grant

Brief Project Description
The UNC SRP Research Translation Core (RTC) is partnering with the Division of Public Health in the NC Department of Health and Human Services (NCDHHS) to develop the capacity of NCDHHS to identify North Carolina populations at greatest potential risk from well water contamination and provide public health action strategies to reduce such exposure. The RTC has geocoded NCDHHS data to enable the identification of data patterns of public health concern related to well water contamination from 25 organic and inorganic contaminants, many of which are high priority Superfund contaminants. The team is creating maps that illustrate these patterns for decision makers, and we are sharing results with NCDHHS, other state agencies and local health department staff. We are also developing training tools and seminars to facilitate technology transfer of the space/time analysis tools used, and we are creating a user-friendly web interface for residents whose wells have been tested.

Audiences
Public Health Professionals
Community Residents/Groups
Policy Makers

Key Successes/ Outcomes
To date, we have mapped 25 contaminants for which private wells are required to be tested by NC law and have identified some data patterns of concern, where public health action may be needed. In one impacted community, initial mapping results have led to an emerging collaboration with the health department to address the issue locally.

Key Approaches that led to success
Active collaboration, through a planning group that meets regularly, with NCDHHS and the NC Department of Environment and Natural Resources.

Obstacles/ Challenges
Significant data inconsistencies (missing data, inaccurate data, etc.) in the initial NCDHHS data set delayed the mapping process. Communicating information about average levels of contaminants while also clearly communicating the limitations of the data and resulting maps is also a challenge.

Communication Materials

Title	Format	Willing to share product? In the RC?
Maps of contaminant across NC	Publications and web site	Yes, as developed and published No

Funding sources for this project
National Institute of Environmental Health Sciences (P42-ES005948)
ARRA Supplement to (P42-ES005948)

Teacher Professional Development on Superfund-Related Topics

Project Leader and Institution
Kathleen Gray, MSPH, UNC Superfund Research Program

Partners/ Key Personnel and Institutions
UNC Superfund Research Program: Dana Haine, MS, Fred Pfaender, PhD
NC Department of Environment and Natural Resources: Sarah Yelton

Project / Grant Number

PEPH Program
Superfund Research Program

Brief Project Description
In recent years, UNC SRP Research Translation Core (RTC) staff has engaged over 350 middle and high school science teachers and 40 nursing students in workshops focused on water quality, environmental health and hazardous contamination.

Audiences
Educators
Public Health Professionals

Key Successes/ Outcomes
Evaluations administered by UNC, NCDENR, NCSU's The Science House and USEPA showed that participating teachers increased their content knowledge and their confidence level in teaching science. Follow-up evaluations of summer institutes showed teacher adoption rates for SRP-related activities ranging from 63%-88% depending on the activity, and 88% of respondents spent more time on Superfund topics as a result of the institute.

Key Approaches that led to success
Aligning lessons with the NC Standard Course of Study and with the nursing curriucla, providing the framework and supporting information for participants to earn CEUs, active collaboration with current teachers and nurses, and pilot testing of lessons in classrooms.

Obstacles/ Challenges

Communication Materials

Title	Format	Willing to share product?	In the RC?
Introduction to Environmental Justice	Lesson plan	Yes	Yes
A Civil Action	Lesson plan	Yes	Yes
Water Muddle Up and Clean Up	Lesson plan	Yes	Yes

Funding sources for this project
National Institute of Environmental Health Sciences (P42-ES005948)

The Children's Environmental Health and Disease Prevention Center at Dartmouth

Project Leader and Institution
Vicki Sayarath, MPH, RD, Dartmouth Medical School

Partners/ Key Personnel and Institutions

Project / Grant Number
1P20ES018175-02RD-83459901-0

PEPH Program
Childrens Environmental Health Centers

Brief Project Description
The Children's Environmental Health Center at Dartmouth is a newly formed center. As part of our community outreach efforts we have developed a website: www.dartmouth.edu/~childrenshealth and are in the process of developing community outreach pages to be added to the site. One of the features of the site is an on-line survey. The survey is designed to obtain general demographic information about who is visiting the site, how many children (if parents or caregivers), specific environmental exposures (private well water and fish consumption), concerns regarding children's environmental health and ways in which the Children's Center at Dartmouth can help inform the community. To publicize the website and survey we have developed a double-sided card to be distributed to two audiences: 1) participants enrolled in our New Hampshire Birth Cohort Study; and 2) the general public. In addition to providing links to the website and survey, the back side of the card will contain information about resources for well water testing in NH. For study participants, the card will be sent to them with the results of water testing (for arsenic levels). We will later survey the study participants to determine if they have made any changes to the their drinking water sources after receiving results and water testing resource information.

Audiences
Community Residents/Groups

Key Successes/ Outcomes
Survey has not yet been implemented

Key Approaches that led to success
N/A

Obstacles/ Challenges
N/A

Communication Materials

Title	Format	Willing to share product?	In the RC?
On-line Survey	Website	Yes	Not yet
Double-sided outreach card	Print	Yes	Yes

Funding sources for this project
National Institute for Environmental Health Services - 1P20ES018175-02
US Environmental Protection Agency - RD-83459901-0

Ohio River Valley Project

Project Leader and Institution
Susan M. Pinney, PhD, University of Cincinnati College of Medicine

Partners/ Key Personnel and Institutions
Robert Bornschein, PhD, University of Cincinnati College of Medicine
Frank Biro, MD, Cincinnati Children's Hospital Medical Center

Project / Grant Number
1R21ES017176-01

PEPH Program
NIEHS funded grant

Brief Project Description
The extent of PFOA exposure through drinking water, to the Ohio River Valley population, is unknown. In a NIEHS funded study, we sampled serum from persons throughout the Ohio River Valley, using the river as a drinking water source, to determine the prevalence of serum PFOA concentration above the NHANES 95th percentile. We also conducted some clinical laboratory tests: hepatic function tests, complete blood count, triglycerides and cholesterol. We reported back to study participants their individual results, for both the biomarkers and the clinical tests. For the clinical test results, study participants could call our study office two days after the blood sample was taken. (Critical values were reported immediately.) For the environmental biomarkers and clinical labs, we sent the study results to participants soon after receiving the environmental biomarker results from the CDC Environmental Laboratory. A photocopy of the participant's clinical laboratory report was sent with an explanation of the purpose of the tests. We created our own form for reporting the individual biomarker results. The mailing also included a copy of the Ohio Department of Health fact sheet for PFOA.

Audiences
Researchers
Public Health Professionals
Community Residents/Groups

Key Successes/ Outcomes
Few calls from particpants after sending out serum biomarker results. Most asked if their family members could participate in the study.

Key Approaches that led to success
Physicians, local health departments and local water treatment departments all received a sample packet of information prior to the mailing to study participants. The cover letter for the sample packets reported the study findings only in very general terms, but did explain the process of returning results to study participants.

Obstacles/ Challenges
Effort required to prepare and send the mailing. Not adequately funded for this effort.

Communication Materials

Title	Format	Willing to share product?	In the RC?
Letter to study participants	Letter	YES	NO
Personal results form	Letter enclosure	YES	YES
Lab test descriptions	Letter enclosure	YES	NO

Ohio Department of Health PFOA Fact Sheet	Letter enclosure	YES	NO

Funding sources for this project
1R21ES017176-01

Fernald Community Cohort

Project Leader and Institution
Susan M. Pinney, PhD, Department of Environmental Health Center for Environmental Genetics, University of Cincinnati

Partners/ Key Personnel and Institutions
Susan M. Pinney, PhD (PI)
Jeanette Buckholz, RN, MSN (Project Coordinator)
Shuk-mei Ho, PhD (NIEHS Core Center PI) Citizens' Advisory Committee of the Fernald Community Cohort

Project / Grant Number
NIEHS P30-ES006096

PEPH Program
EHS Core Centers

Brief Project Description
The Fernald Community Cohort (FCC) is a longitudinal cohort followed over 18 years, with archived data and biospecimens available for sharing with outside researchers. Cohort members are the former participants of the Fernald Medical Monitoring Program (FMMP). This medical surveillance program was created in 1990 as a result of a litigation settlement between the US Department of Energy (DOE) and individuals living or working within five miles of the Fernald uranium processing plant (near Cincinnati, Ohio). The funds from the settlement were placed in a foundation (Fernald Medical Foundation, Inc.) and used to fund an 18 year examination program. The Fernald Community Cohort (N=9783) includes 5294 female and 4489 male participants; 99.5% are Caucasian. The FMMP has conducted 42,775 medical examinations through the end of 2008. Although the cohort was established because of potential uranium exposure, a large portion of the cohort is appropriate to use for studies that are not related to radiation or uranium exposure. Much of the cohort never received exposure beyond the background received by the general population. Uranium dose reconstruction using models developed by the CDC for the Fernald exposure domain, demonstrate that over 60% of the cohort had such minimal exposure to uranium and radon that their cumulative ionizing radiation exposure was less than 3.2% over lifetime background levels.Individuals and groups interested in using the FCC database and samples for health-related research may apply for Access to Data and/or Frozen Biologic Specimens. If approved by the FCC Advisory Committee, data files from the FCC database or archived samples (frozen whole blood, serum, plasma and urine) may be distributed to qualified researchers. A description of the Access to Data and Biospecimens

Audiences
Health Care Providers
Researchers
Public Health Professionals
Community Residents/Groups
Media/Journalist

Key Successes/ Outcomes
Sharing of data and biospecimens for 63 research projects to date. Users include researchers at the National Cancer Institute and universities such as the U of South Carolina, University of North Carolina as well as multiple researchers at the University of Cincinnati.

Key Approaches that led to success
Large effort to publicize the availability of data and biospecimens from the cohort. Needed to convince researchers that the cohort members were representative of the general population, that data were of high quality, and that we had

solid information on which to base our statement that the unexposed members of the cohort were truly unexposed (and very appropriate for non-exposure research studies).

Obstacles/ Challenges

Skepticism. Interdisciplinary symposium planned for September 9, 2011

Communication Materials

Title	Format	Willing to share product?	In the RC?
The Fernald Community Cohort	Brochure	YES	NO
Interdisciplinary Symposium: The Fernald Community	Brochure	YES	YES

Funding sources for this project

NIEHS P30-ES006096
U of Cincinnati Institutional Funds
Fernald Medical Foundation, Inc.

Fernald Community Cohort

Project Leader and Institution
Susan M. Pinney, PhD, Department of Environmental Health Center for Environmental Genetics, University of Cincinnati

Partners/ Key Personnel and Institutions
Susan M. Pinney, PhD (PI)
Jeanette Buckholz, RN, MSN (Project Coordinator)
Shuk-mei Ho, PhD (NIEHS Core Center PI) Citizens' Advisory Committee of the Fernald Community Cohort

Project / Grant Number
NIEHS P30-ES006096

PEPH Program
EHS Core Centers

Brief Project Description
In conducting our research, we determined that there was an increased incidence of breast cancer related to uranium exposure in the women of the The Fernald Community Cohort (FCC). Cohort members are the former participants of the Fernald Medical Monitoring Program (FMMP). This medical surveillance program was created in 1990 as a result of a litigation settlement between the US Department of Energy (DOE) and individuals living or working within five miles of the Fernald uranium processing plant (near Cincinnati, Ohio). The funds from the settlement were placed in a foundation (Fernald Medical Foundation, Inc.) and used to fund an 18 year examination program. At the time we discovered the excess in breast cancer incidence, the medical examination program had recently come to an end. Women were no longer able to receive mammograms through the medical monitoring program; under the program, adherence with yearly mammograms for those that were age eligible was at about 75%. We were concerned that the women were not obtaining mammography screening.

Audiences
Health Care Providers
Researchers
Community Residents/Groups

Key Successes/ Outcomes
Letters were mailed to over 700 females who were in the uranium exposed group and to their health care providers. A second mailing included a questionnaire about the information sent previously. Of the 142 who were due for a mammogram at the time the letter was mailed, 139 reported that they scheduled a mammogram after receiving the letter.

Key Approaches that led to success
Drafts of the letter were sent to members of many different audiences to ensure that it was understandable. We sent a communication to health care providers several days before mailing the letters to the cohort members, so that the health care providers would be informed when they received calls from their patients. The communication to health care providers included a sample of the letter being sent to the women. Because of our consents, we were not able to tell health care providers which of their patients were in the higher risk group.

Obstacles/ Challenges
Very sensitive information, needed much thought and review prior to sending. Also required IRB approval.Large mailing needing much coordination.Our questionnaire results indicate that 30% of the women did not remember receiving the letter. We speculate that many were discarded before opening the envelope.

Communication Materials

Title	Format	Willing to share product?	In the RC?
Letter to at risk females, not breast cancer cases	Letter	YES	NO
Letter to ask risk females who were breast cancer cases	Letter	YES	YES
Letter to health care providers	Letter	YES	NO

Funding sources for this project

U of Cincinnati Institutional Funds

Fernald Medical Foundation, Inc.

Increasing Capacity and Public Trust: A Strategy for Building Effective Sustainable Community-Academic Partnerships through Mentoring, Education and Workforce Develoment

Project Leader and Institution
Principal Investigator: Watkins, Beverly-Xaviera, NYUMC
Principal Investigator: Reyes, Damaris, GOLES

Partners/ Key Personnel and Institutions
Good Old Lower East Side, GOLES
Chinese Progressive Association, CPA
Families United for Racial Equality, FUREE
United Puerto Rican Association of Sunset Park, UPROSE
Youth Ministries for Peace and Justice, YMPJ

Project / Grant Number
RC1ES018479-01; 3RC1ES01847901S1,01S2; 5RC1ES01847902

PEPH Program
ARRA Challenge Grant

Brief Project Description
The Good Old Lower East Side, GOLES, Environmental Justice Collaborative is developing a replicable strategy to rapidly and effectively increase the capacity of local community based organizations to partner with academic institutions and fully engage in biomedical and behavioral research. The collaborative creates both formal and informal linkages between the local community and academic institutions through the employment and training of local residents as environmental health community organizers. The partnership provides GOLES with the intellectual and financial resources to build a research knowledge base, and increase environmental public health awareness in the Lower East Side.

Audiences
Health Care Providers
Researchers
Educators
Public Health Professionals
Community Residents/Groups
Media/Journalist

Key Successes/ Outcomes
Training of Community Residents as EPH Community Health Representatives/Organizers and training of community /GOLES members as EPH Community Stewards. CURRICULA: BX Watkins and DG Reyes (2010). Environmental Public Health Community Leadership Development: A Collaborative Curriculum for Community-based Organizations. GOLES Environmental Justice Collaborative.
BX Watkins, DG Reyes and LL Green (2010). Building an Environmental Justice Youth Corps: A Summer Training Curriculum for High School Students.
BX Watkins and DG Reyes (2011). The GOLES Environmental Leadership Workforce Development Program: A Training Curriculum for Community. GOLES Environmental Justice Collaborative.
BX Watkins and DG Reyes (2011). Meeting the Challenge: A Guide to Building Community-Academic Partnerships. GOLES Environmental Justice Collaborative.

Key Approaches that led to success

Community-driven collaborative processs, community was an active participant in design and development of traing programs and curricula.

Obstacles/ Challenges

Environmental issues do not resonate with the Lower East Side community; they are percieved as abstract and boring. Building of community understanding and support of EJ issues is a protracted process that will require developing innovative apporaches to engaging community residents. The EJ Collaborative has laid the foundation but this is only the first step.

Communication Materials

Title	Format	Willing to share product?	In the RC?
BX Watkins and DG Reyes (2010). Environmental Public Health Community Leadership Development: A Collaborative Curriculum for Community-based Organizations. GOLES Environmental Justice Collaborative.	Curricula	not yet	no
BX Watkins, DG Reyes and LL Green (2010). Building an Environmental Justice Youth Corps: A Summer Training Curriculum for High School Students.	Curricula	not yet	not yet
BX Watkins and DG Reyes (2011). The GOLES Environmental Leadership Workforce Development Program: A Training Curriculum for Community. GOLES Environmental Justice Collaborative.	Curricula	not yet	no
BX Watkins and DG Reyes (2011). Meeting the Challenge: A Guide to Building Community-Academic Partnerships. GOLES Environmental Justice Collaborative.	Guide	not yet	no
http://goles-ejyc.ning.com	NING network website	yes	not sure

Funding sources for this project

1RC1ES01847901; 3RC1ES01847901S1,01S2; 5RC1ES01847902

Growing Up Female - Returning Biomaker Results

Project Leader and Institution
Frank Biro, MD, Cincinnati Childrens' Hospital Medical Center
M. Kathryn Brown, PhD, University of Cincinnati College of Medicine
Ann Hernick, Breast Cancer Advocate
Susan M. Pinney, PhD, University of Cincinnati College of Medicine

Partners/ Key Personnel and Institutions
Community advocates from two breast cancer advocacy groups: Breast Cancer Alliance of Greater Cincinnati and the Pink Ribbon Girls.

Project / Grant Number
U01 ES12770-01

PEPH Program
Breast Cancer and Environment Research Program

Brief Project Description
Within the Breast Cancer and the Environment Research Programs, the puberty studies included measurements of environmental biomarkers in blood serum and urine of young girls. Data from the 2005 biomarker feasibility (pilot) study showed approximately 50% of the samples from Cincinnati had concentrations of PFOA that were above the 95th percentile of the NHANES children, age 12-19. Additionally, there was a variation in PFOA levels between the study participants that lived in Community A and B within Greater Cincinnati. The Cincinnati BCERC needed to 1) verify these finding; 2) determine if elevated serum PFOA concentrations were present in other BCERC girls from Cincinnati, 3) attempt to identify the source; 4) communicate these findings to the study families and public health officials; CDC repeated their analyses and confirmed the original results. NIEHS then assisted us in developing a plan with the CDC Environmental Lab to measure serum PFOA in serum collected one year later from the pilot study girls, and an additional 30 girls from Community B, were the elevated levels had been found. The results confirmed that there were distinct differences between communities and these levels were well above the NHANES 95 percentile.

Audiences
Researchers
Community Residents/Groups

Key Successes/ Outcomes
We were able to successfully communicate these findings to the subset of parents of girls in the area with higher PFOA serum concentrations (Area B). We also published this process in Environmental Health Perspectives, with one of our community advocates as the first author. Hernick AD, Brown MK, Pinney SM, Biro FM, Ball KM, Bornschein RL. Sharing Unexpected Biomarker Results with Study Participants. Environ Health Perspect 2011; 119:1-5. doi:10.1289/ehp.1001988.

Key Approaches that led to success
Much preparatory discussion between researchers and community advocates. Community advocates directly involved in the preparation of materials for information distribution. See attached slides.

Obstacles/ Challenges
Coming to a consensus about whether findings should be communicated, what should be communicated, and how.

Communication Materials

Title	Format	Willing to share product?	In the RC?
GUF Biomarker Results Process	Slides	YES	NO
GUF personal results form	Letter enclosure	YES	YES
BCERC PFC Fact Sheet	Handout	YES	NO

Funding sources for this project
U01 ES12770-01

Partnerships for Environmental Public Health -- Resource Center

Project Leader and Institution
Liam O'Fallon, National Institute of Environmental Health Sciences

Partners/ Key Personnel and Institutions
1. Justin Crane, MDB, Inc.
2. Lynn Albert, MDB, Inc.
3. Patrick Jones, MDB, Inc.

Project / Grant Number
Contract

PEPH Program
Umbrella Program to coordinate NIEHS EPH Programs

Brief Project Description
The purpose of the PEPH Resource Center is to facilitate entry, management, viewing, and publishing of educational and outreach materials created by NIEHS grantees under the PEPH umbrella. The PEPH Resource Center will also foster sharing and exchange of materials, which should reduce the duplication of efforts, and promote the advancement of new communication strategies.

Audiences
PEPH Grantees and Partners

Key Successes/ Outcomes
In the last year that the PEPH Resource Center (RC) has been active, we have received 126 materials from 9 programs that are a part of the PEPH program. 70 of which have been published to the RC. The RC provides ways for grantees to submit and manage their materials.

Key Approaches that led to success
A large part of the success has been the interactions with PEPH grantees, especially the solicitation of their feedback on what works and what is needed.

Obstacles/ Challenges
There have been two key obstacles. (1) the large number of programs and projects that are a part of the PEPH program. (2) the technology and the need for password protected collaborative workspace.

Communication Materials

Title	Format	Willing to share product?	In the RC Center?
Material Requirements Document	Brochure	Yes	Yes
PEPH Webinars	Video	Yes	Pending

Funding sources for this project
NIEHS